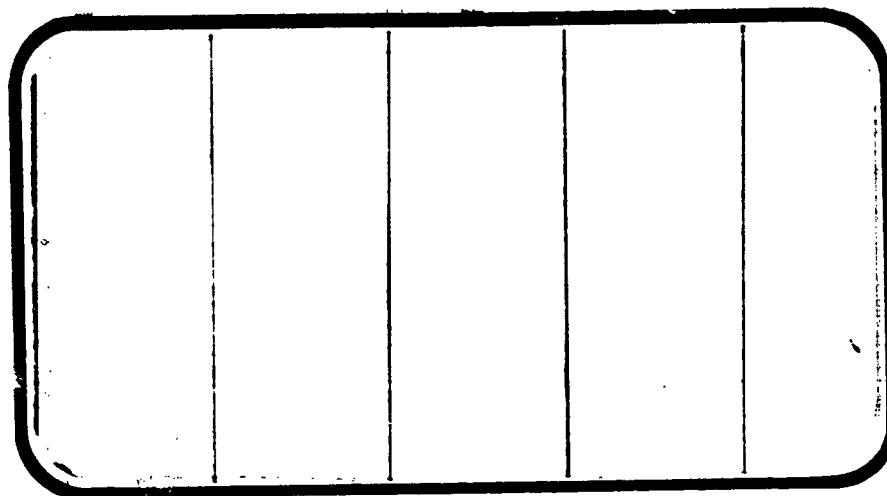


NASA

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR.

141807



(NASA-CR-141807) AN INVESTIGATION IN THE  
NASA MSFC 14-INCH TRANSONIC WIND TUNNEL TO  
DETERMINE THE PRESSURE DISTRIBUTION OVER THE  
COMPONENTS OF A 0.004 SCALE VERSION OF THE  
ROCKWELL MCP 0074 BASELINE SHUTTLE ASCENT

N76-11223

Unclas  
63/13 04148

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services

SPACE DIVISION



CHRYSLER  
CORPORATION

1  
September, 1975

DMS-DR-2027  
NASA-CR-141,807  
VOLUME 1 OF 3

AN INVESTIGATION IN THE NASA MSFC 14-INCH  
TRISONIC WIND TUNNEL TO DETERMINE THE PRESSURE  
DISTRIBUTION OVER THE COMPONENTS OF A  
0.004 SCALE VERSION OF THE ROCKWELL MCR 0074  
BASELINE SHUTTLE ASCENT CONFIGURATION  
(IA32F)

by

Paul E. Ramsey, NASA/MSFC

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services  
Chrysler Corporation Space Division  
New Orleans, La. 70189

for

Engineering Analysis Division  
Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas



**WIND TUNNEL TEST SPECIFICS:**

Test Number; MSFC TWT 567  
NASA Series No.: IA32F  
Occupancy Hours: 151  
Date: May 10-24, 1973

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AN INVESTIGATION IN THE NASA MSFC 14-INCH  
TRISONIC WIND TUNNEL TO DETERMINE THE PRESSURE  
DISTRIBUTION OVER THE COMPONENTS OF A 0.004 SCALE  
VERSION OF THE ROCKWELL MCR 0074 BASELINE SHUTTLE  
ASCENT CONFIGURATION (IA32F)

by

Paul E. Ramsey, NASA/MSFC

ABSTRACT

An aerodynamic investigation was conducted in the MSFC 14x14-inch Trisonic Wind Tunnel to determine the pressure distribution over the components of a .004 scale version of the Rockwell International MCR 0074 baseline Shuttle ascent configuration. Data were obtained for Mach numbers from 0.6 to 3.48, angles of attack from -10 to 10 degrees, and angles of sideslip from -10 to 10 degrees at zero angle of attack. Also, -4 and 4 degrees sideslip were run for an angle of attack of -5 and 5 degrees. The baseline geometric parameters were Orbiter/ET incidence of 0.5 degree, separation distance at aft tie point 0.14 inch, baseline SRM location ( $\phi_s = 90^\circ$ ,  $X_s = 0$ ), and ET ogive nose without retro rocket package. Control deflections were excluded from investigation. Data are presented in terms of pressure coefficient,  $C_p$ , as a function of longitudinal distance,  $X/L$ , at constant circumferential position,  $\phi$ , and  $\phi$  at constant  $X/L$ . Because of the large volume of data obtained, only typical plots are in this report. Volume 1 contains plotted ET pressure data; Volume 2 contains plotted SRM pressure data; and Volume 3 contains the appendix--the complete set of tabulated source data.

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	MACH		
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	MACH		
	ALPHA		

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PRESSURE DISTRIBUTION ON LEFT SRM BOOSTER T9 S3/2 S3/2 03	PHI ALPHA MACH	(C)		793-864
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RADIAL PRESSURE DISTRIBUTION ON LEFT SRM BOOSTER T9 S3/2 S3/2 03 U5	X/LS ALPHA MACH	(B)		1381-1416
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## PLOTTED COEFFICIENTS SCHEDULE

- (A) CP versus X/LT
- (B) CP versus PHI
- (C) CP versus X/LS

# NOMENCLATURE

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$A_b$		base area, in. <sup>2</sup>
$b_{ref}$	BREF	lateral reference length, in.
$c$		theoretical chord length, in.
$C_p$	CP CONFIG	pressure coefficient, $\frac{P_l - P_\infty}{q}$ configuration code $q$
$i_o$	ORBINC	orbiter incidence angle relative to external tank, positive when tail down, deg.
$l_{ref}$	LREF	longitudinal reference length, in.
$l_s$	LS	length of SRM, in.
$l_t$	LT	length of external tank, in.
$M_\infty$	MACH	freestream Mach number
$P_l$		local pressure measured on the test model, psi
$P_\infty$	PSA	freestream static pressure, psi
$P_T$	PTA	freestream total pressure, psi
$q$	Q	dynamic pressure, psi
$RN/l$	RL	Reynolds number per unit length; million/ft
$S_{ref}$	SREF	reference area, in. <sup>2</sup>
$T$		temperature, °F
$X$		longitudinal displacement along centerline measured from body nose, in.
$X/c$	X/C	longitudinal distance from theoretical wing leading edge ratioed to the theoretical chord
$X/l_s$	X/LS	longitudinal location measured from SRM nose ratioed to length of SRM



# NOMENCLATURE (continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$X/\ell_t$	$X/LT$	longitudinal location measured from external tank nose ratioed to length of external tank
$X_{C.G.}$ $X_S$	XMRP X-SRM	longitudinal moment reference point, in longitudinal location of SRM on external tank, zero for baseline, in
$Y$ $Y_{C.G.}$	YMRP	lateral displacement from centerline lateral moment reference point, in
$Z$	DELTAZ	separation distance between external tank top and orbiter bottom, measured at the aft tie point, in
$Z_{C.G.}$	ZMRP	vertical moment reference point, in
$\alpha$	ALPHA	angle of attack, deg.
$\beta$	BETA	angle of sideslip, deg.
$\Gamma$	DIHDL	dihedral angle, deg.
$\delta_a$	AILRON	aileron deflection angle, deg.
$\delta_e$	ELEVTR	elevator deflection angle, deg.
$\delta_r$	RUDDER	rudder deflection angle, deg.
$\eta$		spanwise location measured from orbiter body centerline ratioed to half span
$\phi$	PHI	circumferential location of pressure orifice, deg.
$\phi_s$		circumferential location of SRM relative to top of external tank, deg.
ET		external tank
SRM or SRB		these two terms are used interchangeably to mean solid rocket booster

# NOMENCLATURE (Concluded)

## SUBSCRIPTS

## DEFINITION

a	aileron
b	base
C.G.	center of gravity
e	elevator
l	local
o	orbiter
r	rudder
s	solid rocket motor
T	total conditions
t	external tank
w	wing
X	pressure orifice number, 1, 2, etc.
$\infty$	free stream conditions
ref	reference conditions

## CONFIGURATIONS INVESTIGATED

The launch configuration consisted of the double delta wing orbiter with one large external hydrogen-oxygen tank (ET) and two solid rocket boosters (SRM) mounted on the ET beneath the orbiter wing (see Figure 1).

Configuration component nomenclature was as follows:

O <sub>3</sub> (B <sub>10</sub> C <sub>5</sub> D <sub>7</sub> F <sub>4</sub> M <sub>3</sub> W <sub>87</sub> E <sub>18</sub> V <sub>5</sub> R <sub>5</sub> )	Rockwell MCR 0074 base orbiter.
T <sub>9</sub>	324-inch diameter external tank with ogive nose cone.
S <sub>3/2</sub>	142-inch diam. solid rocket motor (one) with 18° nose cone.
U <sub>r</sub>	Aft orbiter and SRM attach structure.

The combinations of components were defined relative to the component on which the data were obtained as follows:

COMPONENTS	DESCRIPTION
<u>Orbiter Data</u>	
(O <sub>3</sub> )/(T <sub>9</sub> )/(S <sub>3/2</sub> )/(S <sub>3/2</sub> )	Orbiter in presence of ET and two SRM's.
(O <sub>3</sub> )/(T <sub>9</sub> )(U <sub>5</sub> )/(S <sub>3/2</sub> )/(S <sub>3/2</sub> )	Orbiter in presence of ET, two SRM's and attach structure.
<u>External Tank Data</u>	
(T <sub>9</sub> )/(S <sub>3/2</sub> )/(S <sub>3/2</sub> )/(O <sub>3</sub> )	ET in presence of two SRM's and orbiter.
(T <sub>9</sub> )(U <sub>5</sub> )/(S <sub>3/2</sub> )/(S <sub>3/2</sub> )/(O <sub>3</sub> )	ET in presence of two SRM's, orbiter, and attach structure.

COMPONENTS	DESCRIPTION
	<u>SRB Data</u>
$(S_{3/2})/(O_3)/(T_9)/(S_{3/2})$	SRM in presence of ET, one SRM, and orbiter.
$(S_{3/2})/(O_3)/(T_9)(U_5)/(S_{3/2})$	SRM in presence of ET, one SRM, orbiter, and attach structure.

Details of the individual components are given in Table III entitled Model Dimensional Data.

## TEST FACILITY DESCRIPTION

The Marshall Space Flight Center 14" x 14" Transonic Wind Tunnel is an intermittent blowdown tunnel which operates by high pressure air flowing from storage to either vacuum or atmospheric conditions. A Mach number range from .2 to 5.85 is covered by utilizing two interchangeable test sections. The transonic section permits testing at Mach 0.20 through 2.50, and the supersonic section permits testing at Mach 2.74 through 5.85. Mach numbers between .2 and .9 are obtained by using a controllable diffuser. The range from .95 to 1.3 is achieved through the use of plenum suction and perforated walls. Mach numbers of 1.46, 1.96, and 2.50 are produced by interchangeable sets of fixed contour nozzle blocks. Above Mach 2.50 a set of fixed contour nozzle blocks are tilted and translated automatically to produce any desired Mach number in .25 increments.

Air is supplied to a 6000 cubic foot storage tank at approximately -40°F dew point and 500 psi. The compressor is a three-stage reciprocating unit driven by a 1500 hp motor.

The tunnel flow is established and controlled with a servo-actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately 180°F. The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of  $20^{\circ}$  ( $\pm 10^{\circ}$ ). Sting offsets are available for obtaining various maximum angles of attack up to  $25^{\circ}$ .

The diffuser section has movable floor and ceiling panels which are the primary means of controlling the subsonic Mach numbers and permit more efficient running supersonically. The sector assembly and supersonic diffuser telescope into the subsonic diffuser to allow easy access to the model and test section.

Tunnel flow is exhausted through an acoustically damped tower to atmosphere or into the vacuum field of 42,000 cubic feet. The vacuum tanks are evacuated by vacuum pumps driven by a total of 500 hp.

Data are recorded by a solid-state digital data acquisition system. The digital data are transferred to punched cards during the run to be reduced later by a computer to proper coefficient form.

## MODEL DESCRIPTION

The model was 0.004 scale and was comprised of three basic geometric components: (1) the external fuel tank; (2) two solid rocket motors (SRM's); and (3) the orbiter configuration. The orbiter and SRM's were fastened to the external tank, which was sting supported. The orbiter and SRM's were fixed with respect to the ET in the axial and radial locations depicted in Figure 1. Only the baseline configuration was tested; i.e., orbiter incidence was  $0.5^\circ$ , orbiter/ET separation at the aft point was 0.14 inch, SRB radial location was  $90^\circ$ , and SRM longitudinal position was 1.732" aft of ET nose. No control surfaces were deflected during this test.

The orbiter consisted of a stainless steel body obtained from the Rockwell force model which was fitted with a pressure instrumented aluminum wing. This wing contained 40 pressure taps, 19 on the top surface of the left wing, 19 on the bottom surface of the right wing, and 2 on the left wing leading edge. The location of each orbiter pressure orifice and the numbering system are presented in Figure 2. The 0.032-inch O.D., annealed stainless steel pressure tubing was routed out the base of the model and along the exterior of the ET sting.

The SRM's and ET were constructed of stainless steel and contained 222 orifices (111 each) and 195 orifices, respectively. Stainless steel, annealed, 0.032-inch O.D. pressure tubing was routed out the base of the SRM's on the outside of the ET sting while the ET tubing was routed out

through the sting. Tubing of 0.050" O.D. was brazed onto the 0.032-inch O.D. tubing as close to the models as possible and routed down the sector, through the tunnel floor, and out the side of the tunnel. At this point, tygon tubing was used to connect the steel tubing to ten 48 port scani-valve heads.

The pressure tap locations on each model component are shown in Figures 2-4. The launch vehicle SRM's and external tank were manufactured at MSFC (Model #450 Assembly) per MSFC drawings 80M51305, 80M51311, 80M51312, and 80M51313. The orbiter was manufactured at Lockheed-Huntsville. The MCR 0074 baseline configuration was defined by Rockwell International drawings VL70-000089B, VL77-000012, VL72-000061B, and VL78-000018.

#### Instrumentation:

The model instrumentation consisted of strain gages located on the sting for measuring sting deflections and the transducers required for the 457 pressure measurements.

The wing pressure taps were numbered chordwise on the top of the left wing, starting at the front at the inboard chord location and moving toward the wing tip. The right wing was numbered similarly except on the bottom of the wing. This is shown in Figure 2.

Since the ET is symmetrical, only the left side was instrumented with pressure taps. These were numbered axially from front to back at each circumferential location, beginning with A and proceeding through K.



The SRM's were numbered similarly except that half of the pressure instrumentation was located on the left SRM and the remainder on the right. This setup was required to obtain a distribution completely around the SRM because of the assymetrical pressure distributions caused by the presence of the ET and the physical limitations of getting all the required tubing in one SRM. Hence, the orifice axial rows are numbered A through H on the left SRM and then picked up on the right SRM with I through P as if continued on the left SRM.

#### Test Procedures:

The ET was supported on an integral straight sting which was mounted in a 5-degree offset. This offset was rolled to  $\pm 90^\circ$  to obtain polars at constant  $-5^\circ$  or  $5^\circ$  angle of attack. To obtain the pitch polars of  $\pm 10^\circ$ , a short "dogleg" sting was used behind the  $5^\circ$  offset to provide zero sting offset. This procedure allowed changing the sting offset easily without disconnecting the model pressure tubing. The sting and model setup is shown in Figure 5.

It should be noted that force data obtained during MSFC TWT 570 (Ref. 4) indicates a substantial ET sting effect on the SRM forces and moments. Because of this fact, the pressure data on the aft portion of the SRM's may contain sting interference effects and should, therefore, be used with caution. Additional force tests are planned to obtain connection factors which can be used with the integrated pressure data to eliminate this problem.

# DATA REDUCTION

The pressure data were reduced to nondimensional coefficient form using the following equation:

$$C_{pX} = (P_X - P_\infty)/q$$

where X indicates the pressure orifice number.

Model reference dimensions were:

PARAMETER	FULL SCALE	MODEL SCALE
S <sub>ref</sub> , Reference area	2690 ft. <sup>2</sup>	6.198 in. <sup>2</sup>
l <sub>ref</sub> , Reference length (Orbiter body length)	1328 in.	5.313 in.
b <sub>ref</sub> , Reference span	1328 in.	5.313 in.

Moment reference point  
(measured from ET nose and  
as a reference. Cor-  
responds to longitudinal  
position of Orbiter nose  
on ET  $\zeta$ .)

## ORBITER

X <sub>MRP</sub> (at orbiter nose)	635 in.	2.549 in.
Y <sub>MRP</sub> (on ET & Orb. $\zeta$ )	0	0
Z <sub>MRP</sub> (1.332 inches below Orbiter $\zeta$ on ET $\zeta$ )	333 in.	1.332 in.

## ET

X <sub>MRP</sub> (2.549 inches aft of ET nose)	635 in.	2.549 in.
Y <sub>MRP</sub> (on ET $\zeta$ )	0	0
Z <sub>MRP</sub> (on ET $\zeta$ )	0	0

	PARAMETER	FULL SCALE	MODEL SCALE
SRM			
	$X_{MRP}$ (0.8017 inch aft SRM nose)	635 in.	2.549 in.
	$Y_{MRP}$ (0.972 inch to right of left SRM $\phi$ )	243 in.	0.972 in.
	$Z_{MRP}$ (on ET & SRM $\phi$ )	0	0

## REFERENCES

1. Simon, Erwin, "The George C. Marshall Space Flight Center's 14 x 14-Inch Trisonic Wind Tunnel Handbook," NASA TMX-53185, December 22, 1964.
2. Lott, R. and Ramsey, P. "An Investigation of the Load Distribution Over The SRB and External Tank of a 0.004 Scale Model of the 049 Space Shuttle Launch Configuration," NASA CR-120,058 (DMS-DR-1255), March, 1973.
3. Ramsey, P., Buchholz, R., Allen, E. and Dehart, J., "Determination of the Aerodynamic Interference Between the Space Shuttle Orbiter, External Tank, and Solid Rocket Booster on a 0.004 Scale Ascent Configuration," NASA CR-120,060 (DMS-DR-2010), April, 1973.
4. Ramsey, P., Davis, T., "Triple Balance Test of PRR Baseline Space Shuttle Configuration on a .004 Scale Model of the MCR 0074 Orbiter Configuration in the MSFC 14 x 14 Inch Trisonic Wind Tunnel (TWT 570) [IA31F(B)]," NASA-CR-134,436 (DMS-DR-2028), December, 1974

### TABLE I

[illegible]

[illegible]

20

**TABLE II (Continued)**

[illegible]

**TABLE II**  
**(Concluded)**

[illegible]



TABLE III  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B10 Body

GENERAL DESCRIPTION: Fuselage, 2A Configuration, Lightweight Orbiter,  
Per Rockwell Lines VL70-000089 "B"

Scale Model = 0.004

VL70-000089 "B"  
DRAWING NUMBER: VL70-000092, 93, 94 "A"

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length in.	<u>1328.3</u>	<u>5.313</u>
Max. Width in. (@ $X_0 = 1528.3$ )	<u>265.0</u>	<u>1.060</u>
Max. Depth in. (@ $X_0 = 1480.52$ )	<u>248.0</u>	<u>0.992</u>
Fineness Ratio	<u>5.012</u>	<u>5.012</u>
Area $\text{ft}^2$		
Max. Cross-Sectional	<u>456.4</u>	<u>1.826</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III (Continued)

MODEL COMPONENT: BODY - Canopy - CS

GENERAL DESCRIPTION: 2A Configuration Per Lines

VL70-000092

Scale Model = 0.004

DRAWING NUMBER: VL70-000092

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (STA Fwd Bulkhead)	<u>391.0</u>	<u>1.564</u>
Max. Width (T. E. Bulkhead)	<u>560.0</u>	<u>2.240</u>
Max. Depth (WP Z = 421.922 to Z = 500)	<u>          </u>	<u>          </u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area		
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III (Continued)

MODEL COMPONENT: BODY - Manipulator Housing D-7

GENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines

VL70-000092

Scale Model = 0.004

DRAWING NUMBER: VL70-000093

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length in.	<u>881.00</u>	<u>3.524</u>
Max. Width in.	<u>51.00</u>	<u>0.204</u>
Max. Depth in.	<u>23.00</u>	<u>0.092</u>
Fineness Ratio	<u></u>	<u></u>
Area		
Max. Cross-Sectional	<u></u>	<u></u>
Planform	<u></u>	<u></u>
Wetted	<u></u>	<u></u>
Base	<u></u>	<u></u>
Fuselage		
BP = 0.00		
WP = 500.00 INFS		
X.426.0 to 1307.0 INFS		

TABLE III (continued)

MODEL COMPONENT: BODY - F4 Body Flap

GENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines VL70-000094A

Scale Model = 0.004

DRAWING NUMBER: VL70-000094A

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length	<u>84.70</u>	<u>0.339</u>
Max. Width	<u>265.00</u>	<u>1.060</u>
Max. Depth	<u>          </u>	<u>          </u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area $\text{ft}^2$		
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>142.64</u>	<u>0.571</u>
Wetted	<u>          </u>	<u>          </u>
Base $\text{ft}^2$	<u>38.65</u>	<u>0.0006</u>

TABLE III (Continued)

MODEL COMPONENT: BODY - OMS POD - M3

GENERAL DESCRIPTION: 2A Lightweight Configuration Per Rockwell Lines

VL70-000094A

Scale Model = 0.004

DRAWING NUMBER: VL70-000094A

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length	<u>346.0</u>	<u>1.384</u>
Max. Width $x_0 = 1450.0$	<u>108.0</u>	<u>0.432</u>
Max. Depth $x_0 = 1500.0$	<u>113.0</u>	<u>0.452</u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area		
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

Ø OF PMS POD

WP = 463.9 INFS : WP 400 + 63.9 = 463.9

BP = 80.0 INFS

Length 1214.0 to 1560.0 = 346.0 INFS

TABLE III (Continued)

MODEL COMPONENT: WING-287 W. Lightweight OrbiterGENERAL DESCRIPTION: Orbiter Configuration Per Lines

Note: (Dihedral) angle is defined at the lower surface of the wing at the 75.33% element line projected into a plane perpendicular to the RRL

VL70-000093Scale Model = 0.004TEST NO.DWG. NO. VL70 -000093DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.)  $\text{Ft}^2$ 

Planform

Span (Theo) In.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees

Incidence Angle, degrees

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Theo) 3.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

EXPOSED DATAArea (Theo)  $\text{Ft}^2$ 

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

Chords:

Root BP108

Tip 1.00  $\frac{b}{2}$ 

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mac NASA)

XXXX-64

Root  $\frac{b}{2} = 0.425$ Tip  $\frac{b}{2} = 1.00$ 

Data for (1) of (2) Sides

Leading Edge Cuff  $\text{Ft}^2$ 

Planform Area

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing Sta

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TABLE III (Continued)

MODEL COMPONENT: Eleven E-18GENERAL DESCRIPTION: 2A Configuration Per W-87Rockwell Lines VL70-000093Data for (1) of (2) SidesScale Model = 0.004DRAWING NUMBER: VL70-000093DIMENSIONS:

	<u>THEORETICAL</u>		<u>ACTUAL MEASURED</u>
	<u>FULL SCALE</u>	<u>MODEL SCALE</u>	<u>MODEL SCALE</u>
Area $\text{FT}^2$	<u>205.52</u>	<u>          </u>	<u>0.003</u>
Span (equivalent) in.	<u>353.34</u>	<u>          </u>	<u>1.413</u>
Inb'd equivalent chord	<u>114.78</u>	<u>          </u>	<u>0.459</u>
Outb'd equivalent chord	<u>55.60</u>	<u>          </u>	<u>0.220</u>
Ratio movable surface chord/ total surface chord			
At Inb'd equiv. chord	<u>.208</u>	<u>          </u>	<u>.208</u>
At Outb'd equiv. chord	<u>.400</u>	<u>          </u>	<u>.400</u>
Sweep Back Angles, degrees			
Leading Edge	<u>0.00</u>	<u>          </u>	<u>0.00</u>
Tailing Edge	<u>-10.24</u>	<u>          </u>	<u>-10.24</u>
Hingeline	<u>0.00</u>	<u>          </u>	<u>0.00</u>
Area Moment	<u>1548.07</u>	<u>          </u>	<u>0.0001</u>
(Normal to hinge line) $\text{FT}^3$			
Produce of Area Moment			

TABLE III (Continued)

MODEL COMPONENT: VERTICAL - V5 (Light Wt. Orbiter Configuration)GENERAL DESCRIPTION: Centerline Vertical Tail, Double WedgeAirfoil with Rounded Leading EdgeScale Model = 0.004DRAWING NUMBER:VL70-000095DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo) $\text{Ft}^2$	<u>413.25</u>	<u>0.007</u>
Planform		
Span (Theo) In	<u>315.72</u>	<u>1.263</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>.404</u>	<u>.404</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>1.074</u>
Tip (Theo) WP	<u>108.47</u>	<u>0.434</u>
MAC	<u>199.81</u>	<u>0.799</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>5.854</u>
W. P. of .25 MAC	<u>635.522</u>	<u>2.542</u>
B. L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle Deg	<u>10.000</u>	<u>10.000</u>
Trailing Wedge Angle Deg	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius ~in.	<u>2.00</u>	<u>0.008</u>
Void Area ~ $\text{Ft}^2$	<u>13.17</u>	<u>0.0002</u>
Blanketed Area ~ $\text{Ft}^2$	<u>12.67</u>	<u>0.0002</u>

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TABLE III (Continued)

MODEL COMPONENT: R5-Rudder

GENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines VL70-000095

Scale Model = 0.004

DRAWING NUMBER: VL70-000095

<u>DIMENSIONS:</u>	<u>THEORETICAL</u>		<u>ACTUAL MEASURED</u>
	<u>FULL SCALE</u>	<u>MODEL SCALE</u>	<u>MODEL SCALE</u>
Area $\text{ft}^2$	<u>106.38</u>	<u>          </u>	<u>0.0017</u>
Span (equivalent) in.	<u>201.0</u>	<u>          </u>	<u>0.804</u>
Inb'd equivalent chord	<u>91.585</u>	<u>          </u>	<u>0.366</u>
Outb'd equivalent chord	<u>50.833</u>	<u>          </u>	<u>0.203</u>
Ratio movable surface chord/ total surface chord			
At Inb'd equiv. chord	<u>0.400</u>	<u>          </u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>          </u>	<u>0.400</u>
Sweep Back Angles, degrees			
Leading Edge	<u>34.83</u>	<u>          </u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>          </u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>          </u>	<u>34.83</u>
Area Moment	<u>526.13</u>	<u>          </u>	<u>0.00003</u>
(Normal to hinge line) FT			
Produce to area and mean chord			

TABLE III (Continued)

MODEL COMPONENT: BODY - External Tank T9

GENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines VL78-000018 and  
VL72-000061B; Body of Revolution, Without Retro Package

Scale Model = .004

DRAWING NUMBER: VL78-000018

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, in.	<u>1989.00</u>	<u>7.956</u>
Max. Width (Dia), in.	<u>324.00</u>	<u>1.296</u>
Max. Depth	<u>          </u>	<u>          </u>
Fineness Ratio L/D	<u>6.13889</u>	<u>6.13889</u>
Area, Ft <sup>2</sup>		
Max. Cross-Sectional	<u>572.55</u>	<u>0.009</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

**REF.**

FS (Orbiter) = 0.00 = TANK Station 751 INFS

WP (ET) = 400 - 344.413 = 55.587 INFS

BP (Orbiter) = 0.00 = 0.00 ET

TABLE III (Continued)

MODEL COMPONENT: BODY - S3 Booster Solid Rocket Motor

GENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines VL77-000012 and

VL72-000061B

Body of Revolution, Data for (1) of (2) Sides

Scale Model = .004

DRAWING NUMBER: VL77-000012

Data for (1) of (2) Sides

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, in. (including nozzle)	<u>1758.00</u>	<u>7.032</u>
Max. Width(Dia) in. BSRM Tank	<u>142.00</u>	<u>0.568</u>
Max. Depth (Dia) AFT Skirt	<u>259.00</u>	<u>1.036</u>
Fineness Ratio	<u>6.787</u>	<u>6.787</u>
Area, Ft <sup>2</sup>		
Max. Cross-Sectional	<u>365.87</u>	<u>0.0059</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

**REF.**

FS (Orbiter) = 0.00 = 751 in. ET = 202.0 BSRM

WP (BSRM) = WP 400 (Orbiter) - 344.413 = 55.587 INFS

BP (Orbiter) = 0.00 = 243.0 BSRM

TABLE III (Continued)

MODEL COMPONENT: BODY - Aft Orbiter and SRB Attach Structure-U<sub>s</sub>

GENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines

VL72-000061B and VL78-000018

Scale Model = .004

DRAWING NUMBER:

<u>DIMENSIONS:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Orbiter Attach Station	<u>1307 in.</u>	<u>5.228 in.</u>
ET Attach Station	<u>2508 in.</u>	<u>8.232 in.</u>
SRB Attach Station	<u>1509 in.</u>	<u>6.036 in.</u>
Area		
Approx. Max. Frontal Area	<u>109 ft<sup>2</sup></u>	<u>.25 in.<sup>2</sup></u>
Planform		
Wetted		
Base		

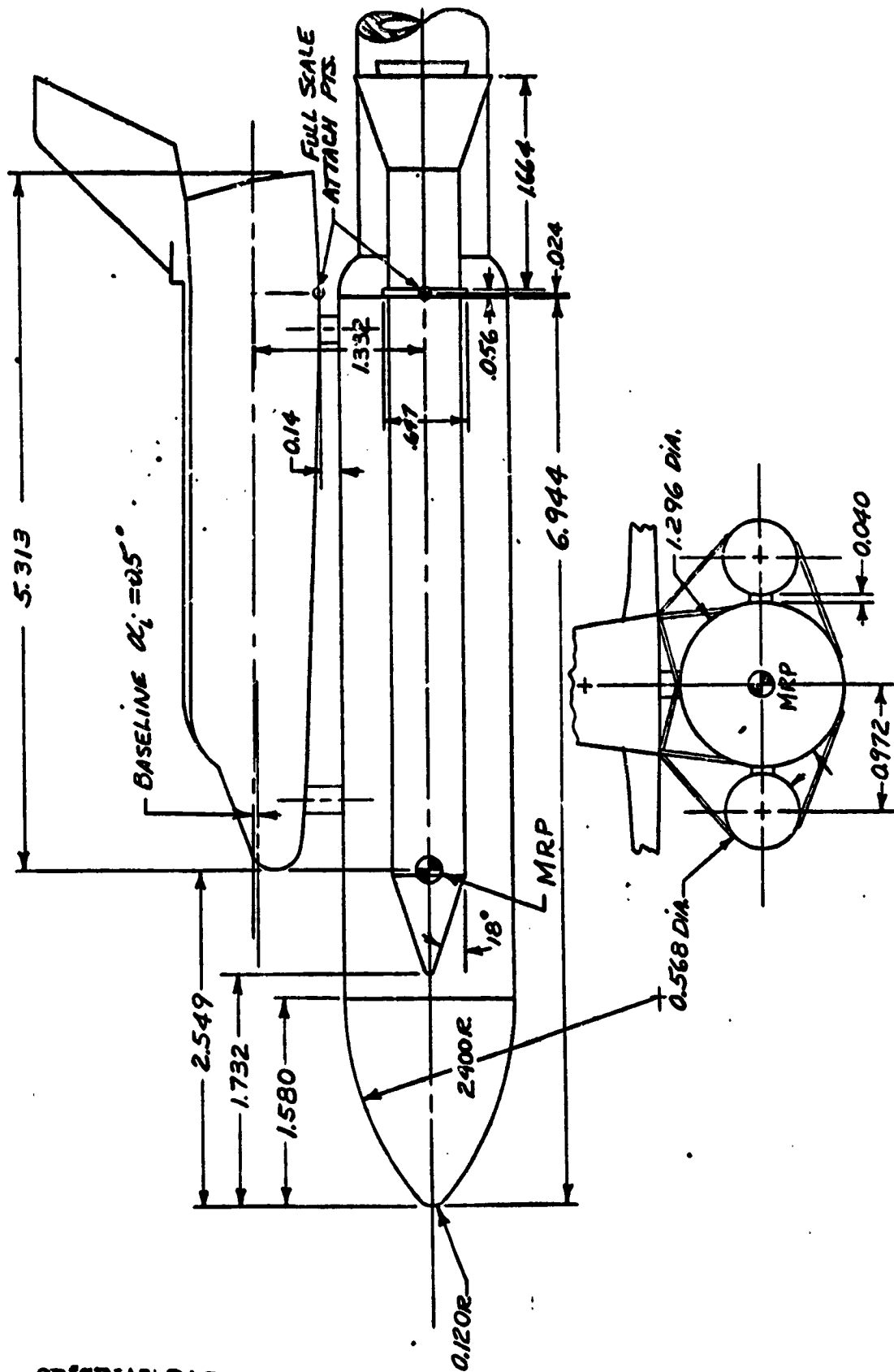


Figure 1. Major Dimensions of Model Components

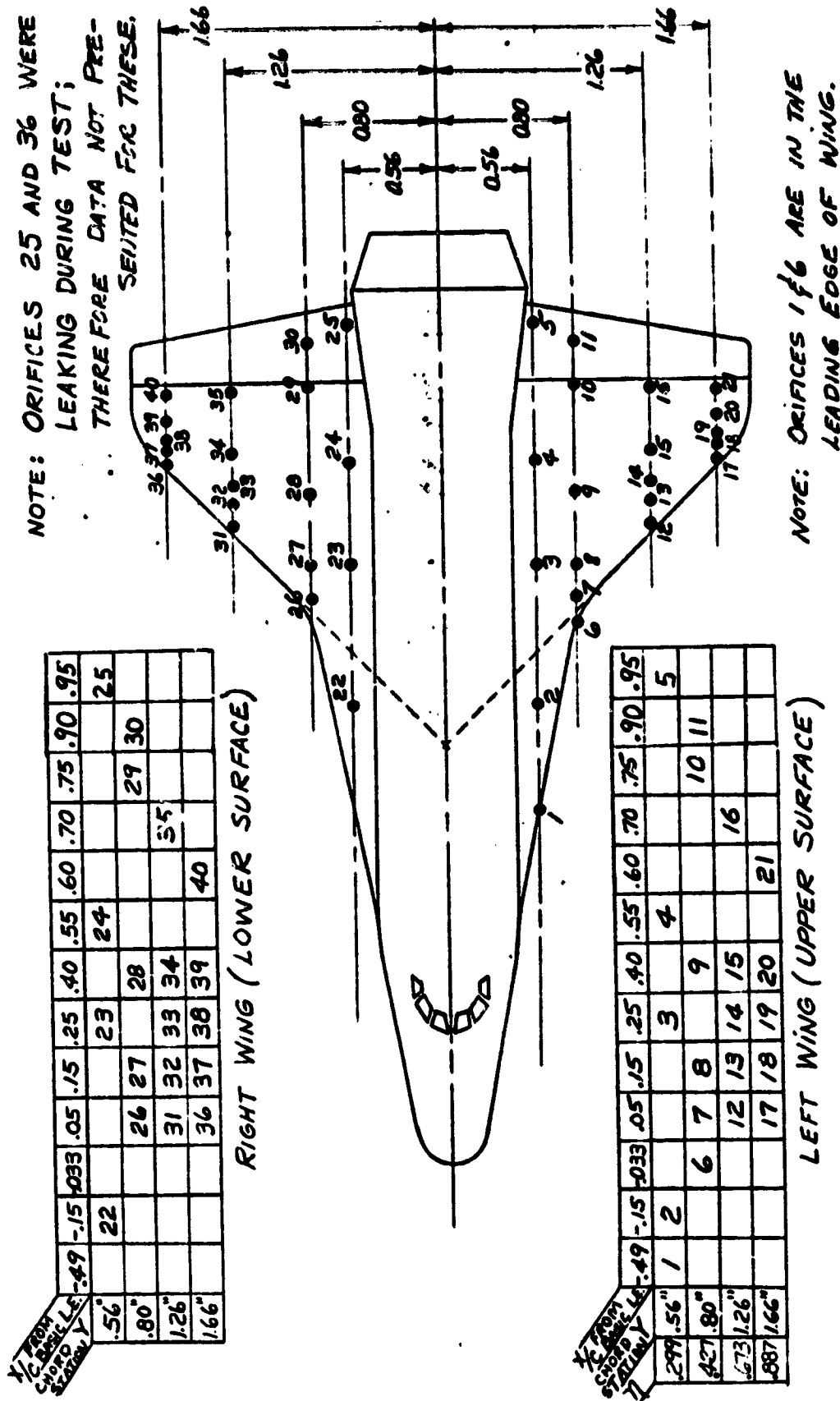
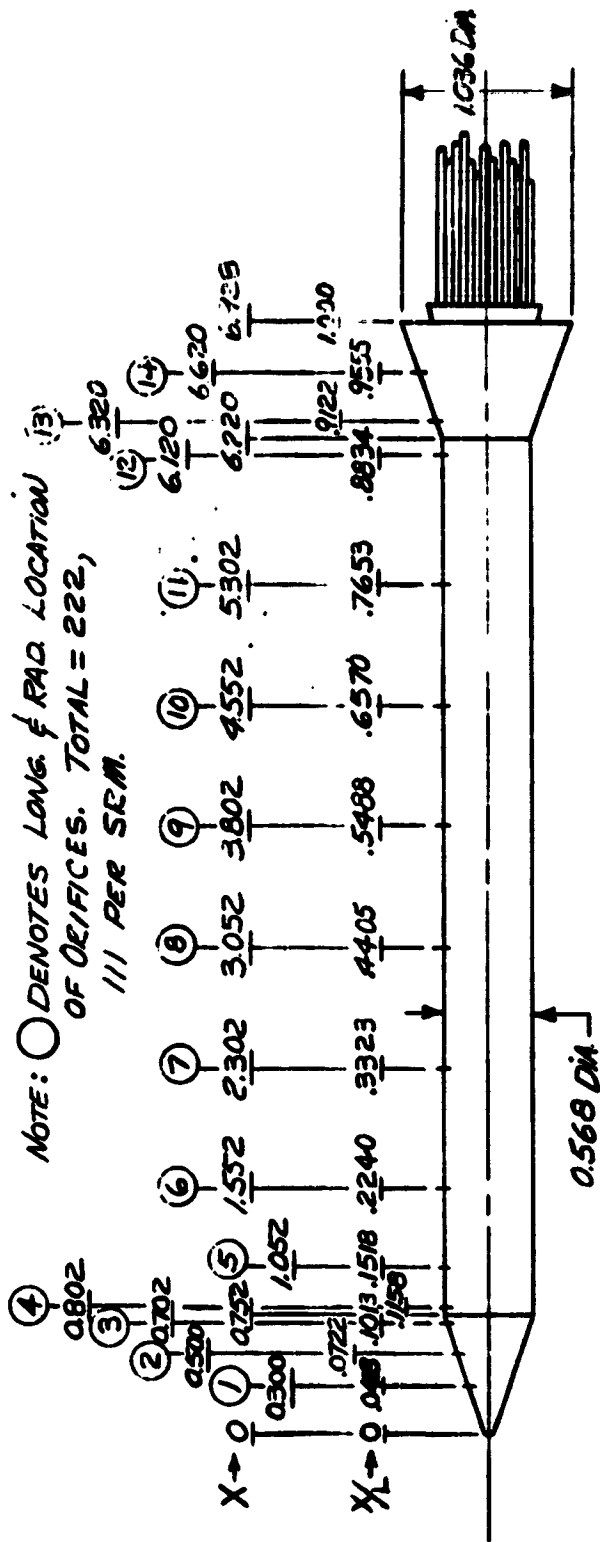
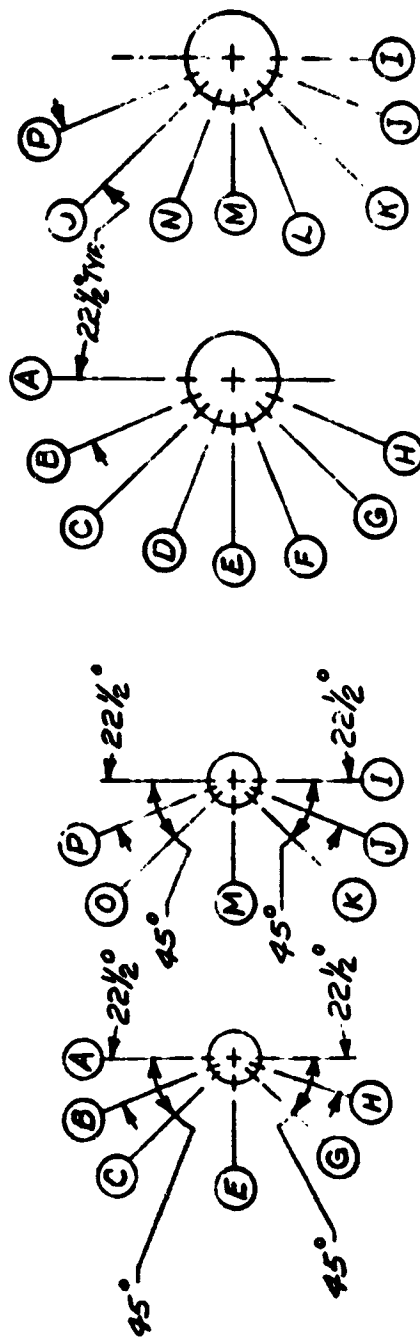


Figure 2. Orbiter Wing Pressure Orifice Locations and Numbering System



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LEFT SEM RIGHT SEM LEFT SEM RIGHT SEM  
SECTIONS AT LONG. STA. 1 & 2 SECTIONS AT LONG. STA. 3 THRU 14

Figure 3. SRM Pressure Orifice Locations

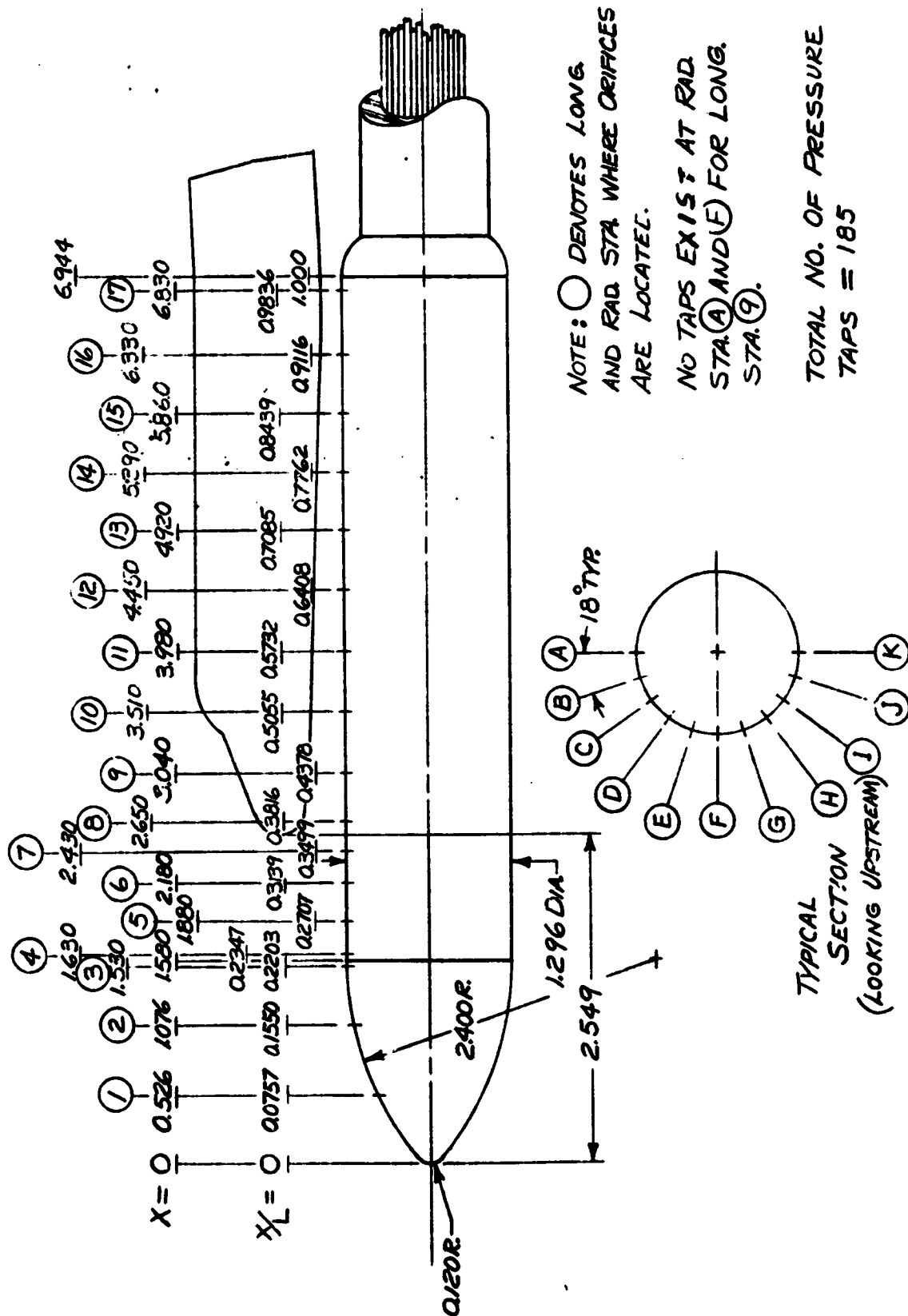


Figure 4. External Tank Pressure Orifice Locations



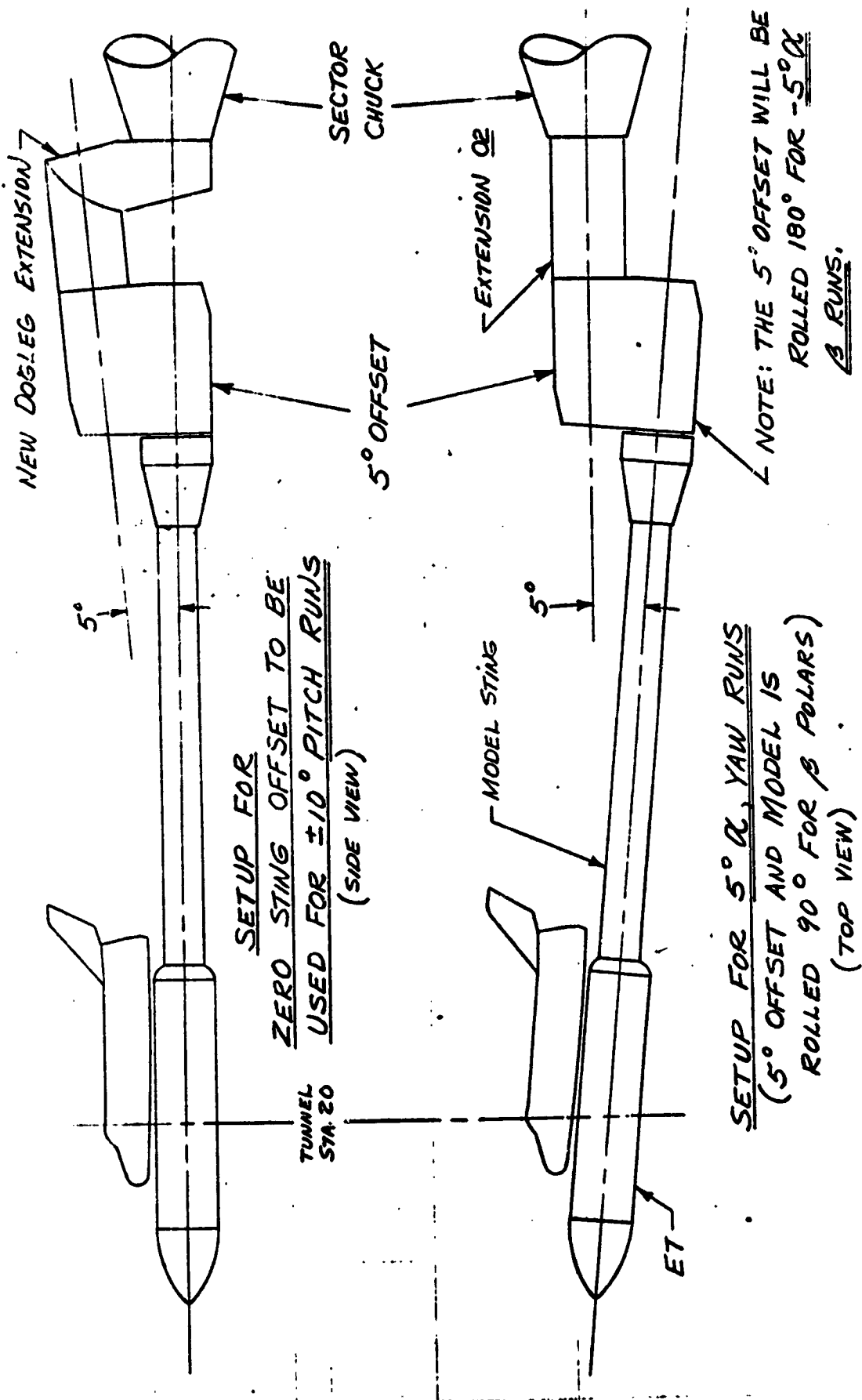


Figure 5. Sting and Model Configurations for Shuttle Launch Pressure Test

**DATA FIGURES**

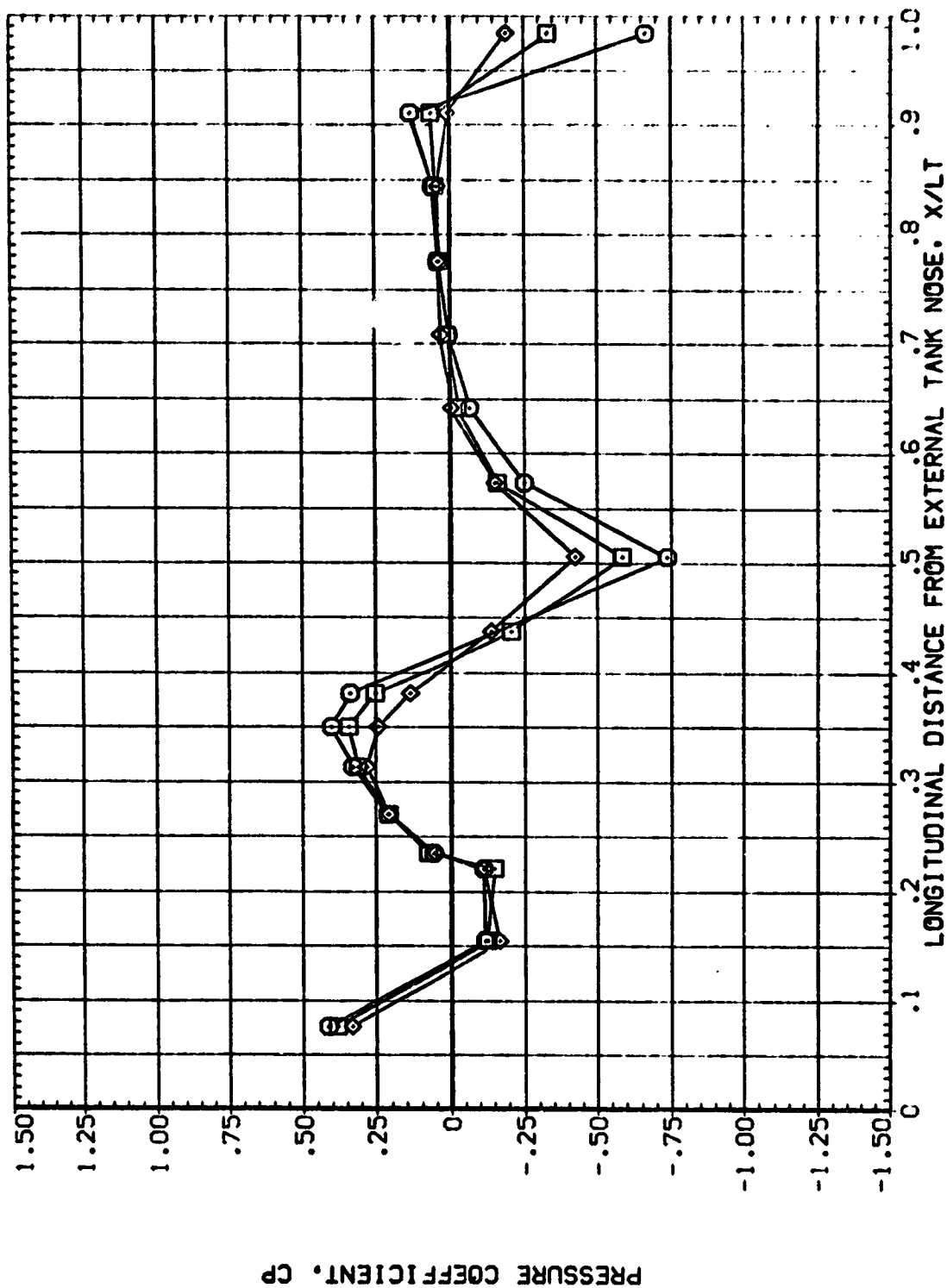
**Volume 1--ET (pgs. 1-792)**

**Volume 2--SRM (pgs. 793-1452)**

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MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMB.	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	BETA	CONF IS	CL	DBINC
□	.000	-8.000	.900	6.199	5.313	5.313	.000	DELTA Z	.000	.140	.000
◇	18.000					2.549		X-SRB	.000	.000	.500
◇	36.000										

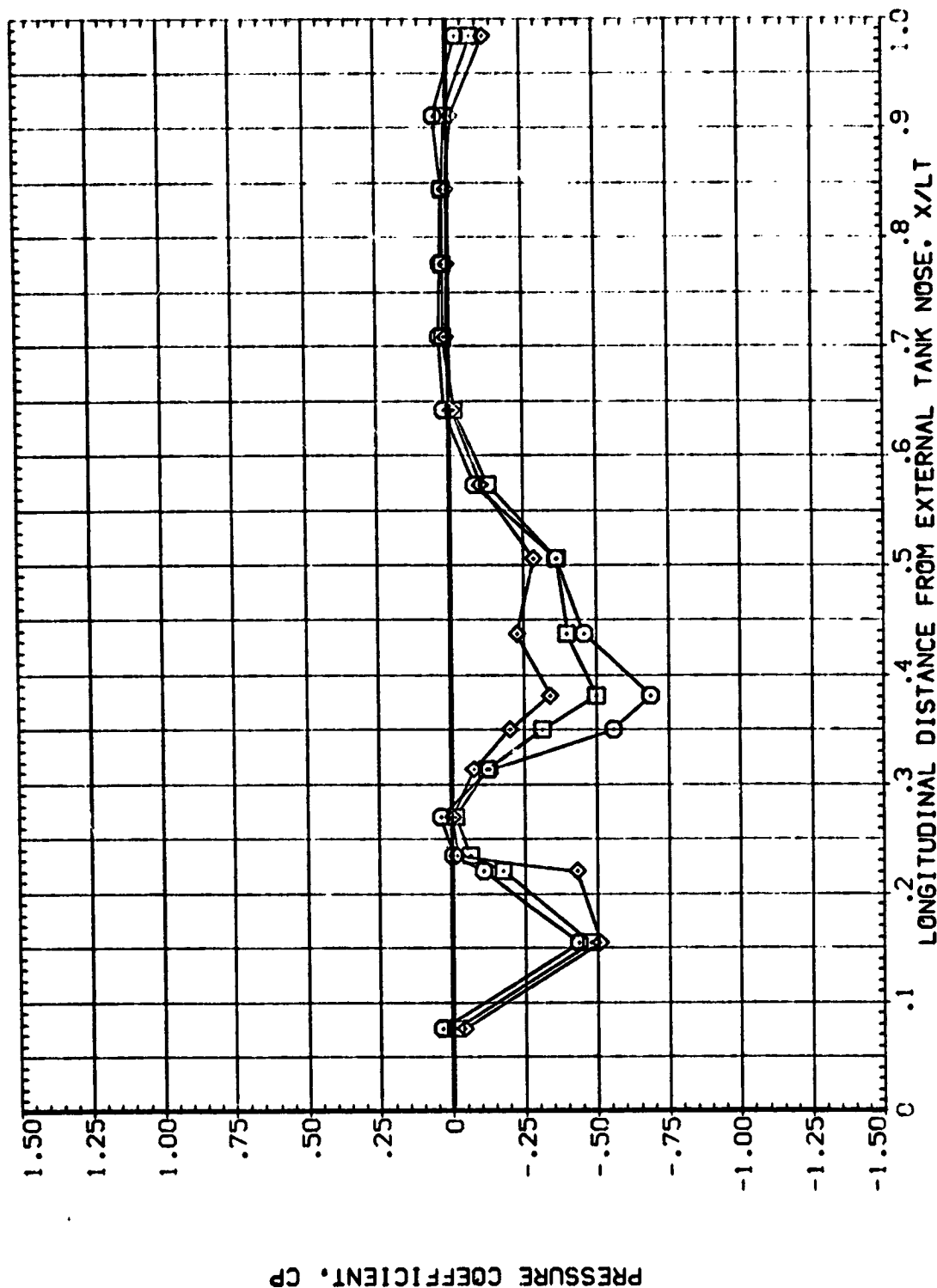


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONFIS	90.000
□	108.000	-8.000	.900	5.313	5.313	2.549	.000	IN.	DELTA Z	.000	.000
◇	126.000			2.549				IN.	X-SRB	.000	.000
◇	144.000			.000				IN.	DRB:NC	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
 ○  
 □  
 ◇

PHI 162.000  
 180.000  
 198.000

ALPHA -8.000

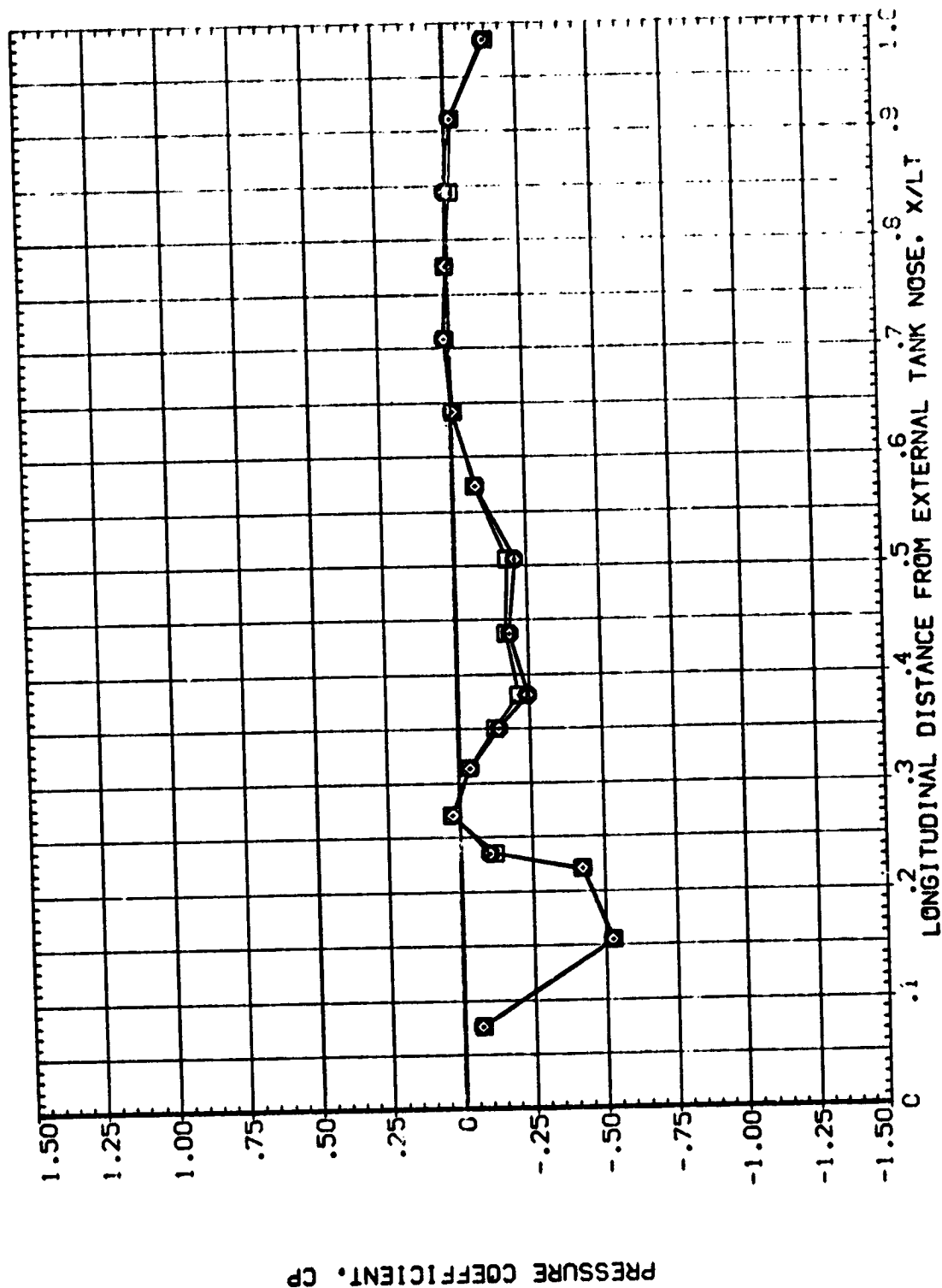
MACH .900

REFERENCE DATA  
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 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 .000 CONF 16  
 .140 RLODR  
 .000 ORSINC  
 90.000  
 .000  
 .500

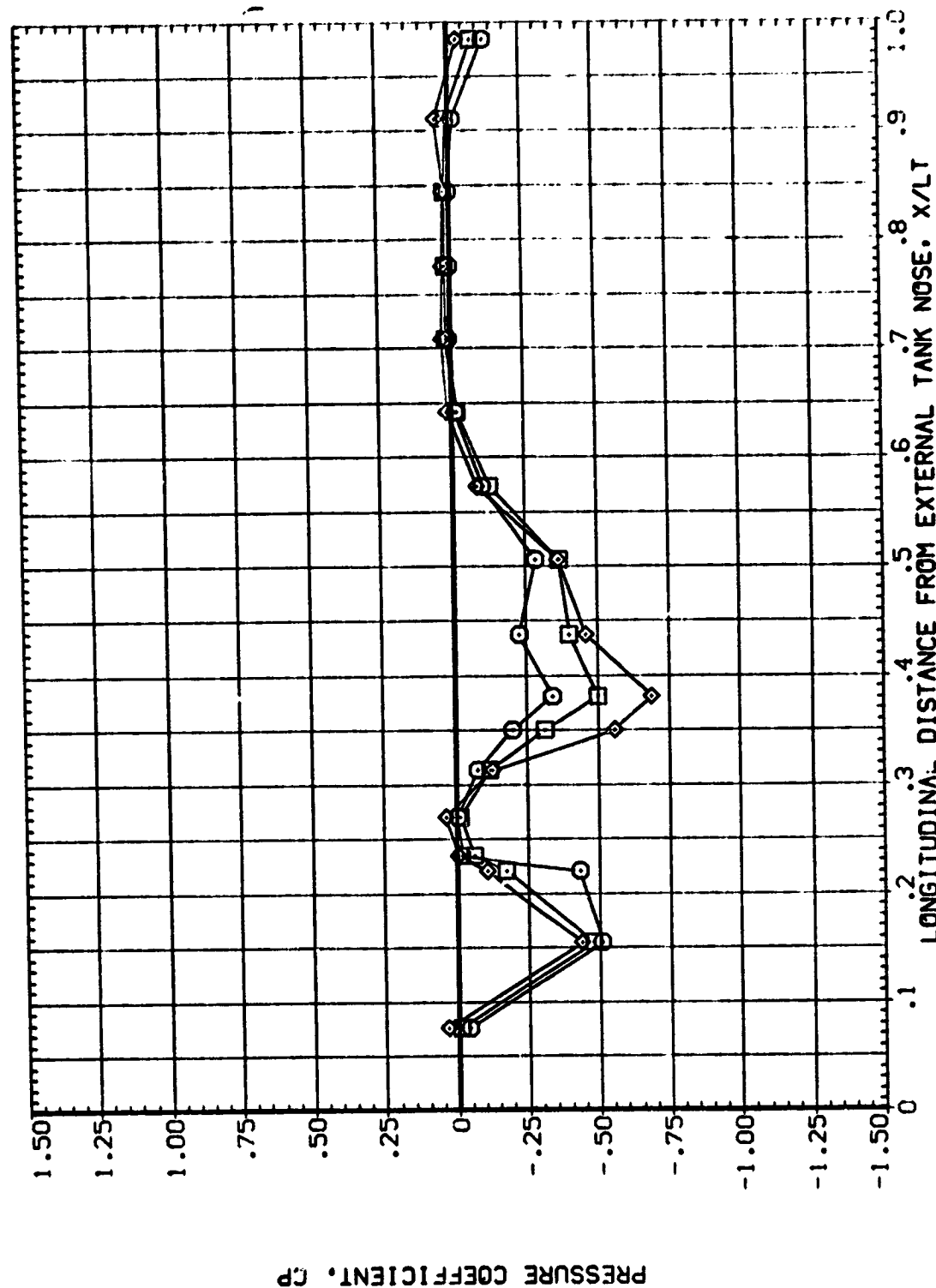


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

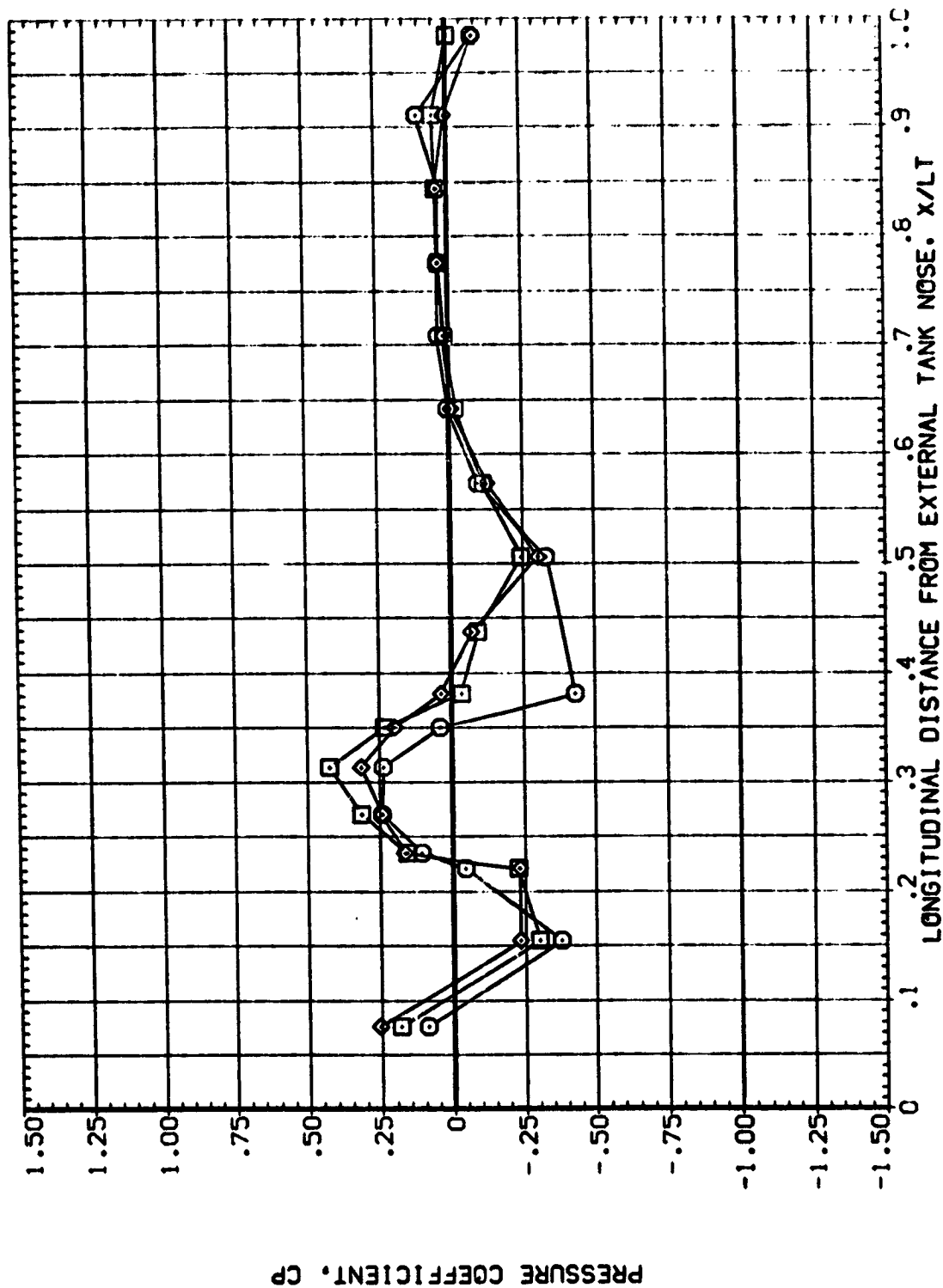
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○	216.000	-8.000	.900	6.198	5.313	5.313	.000	DELTA Z	.000	.140	.000
□	234.000			2.549	.000	.000	.000	X-SRB	.000	.000	.500
◇	252.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	270.000	288.000	-8.000	.900			SREF LREF BREF XRRP YRRP ZRRP	50. IN. IN. IN. IN. IN. IN.	BETA DELTA Z X-SRB	.000 .140 .000 DRBINC 90.000 .000 .500
○							6.198 5.313 5.313 2.549 .000 .000			
□										
◇										



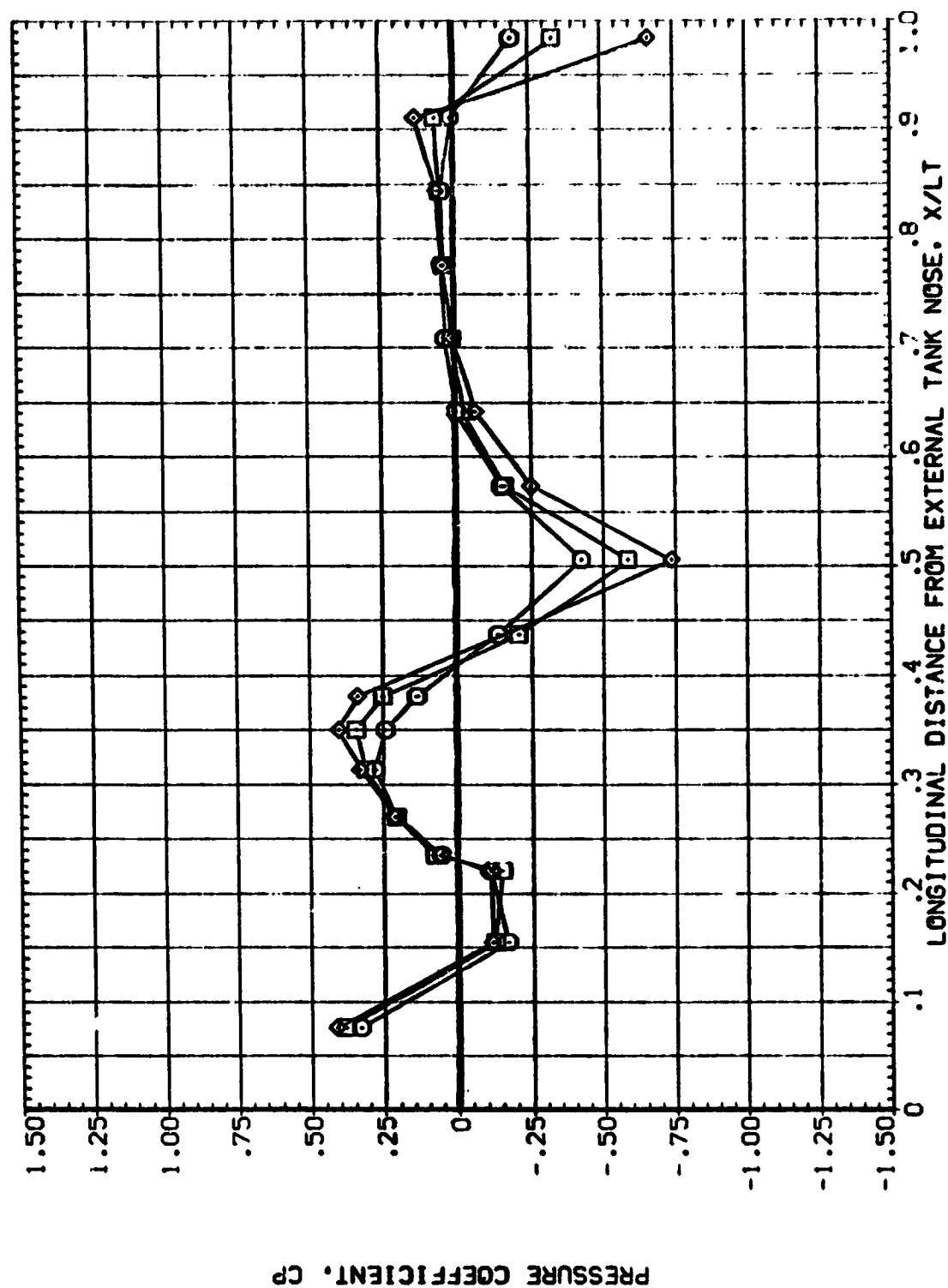
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

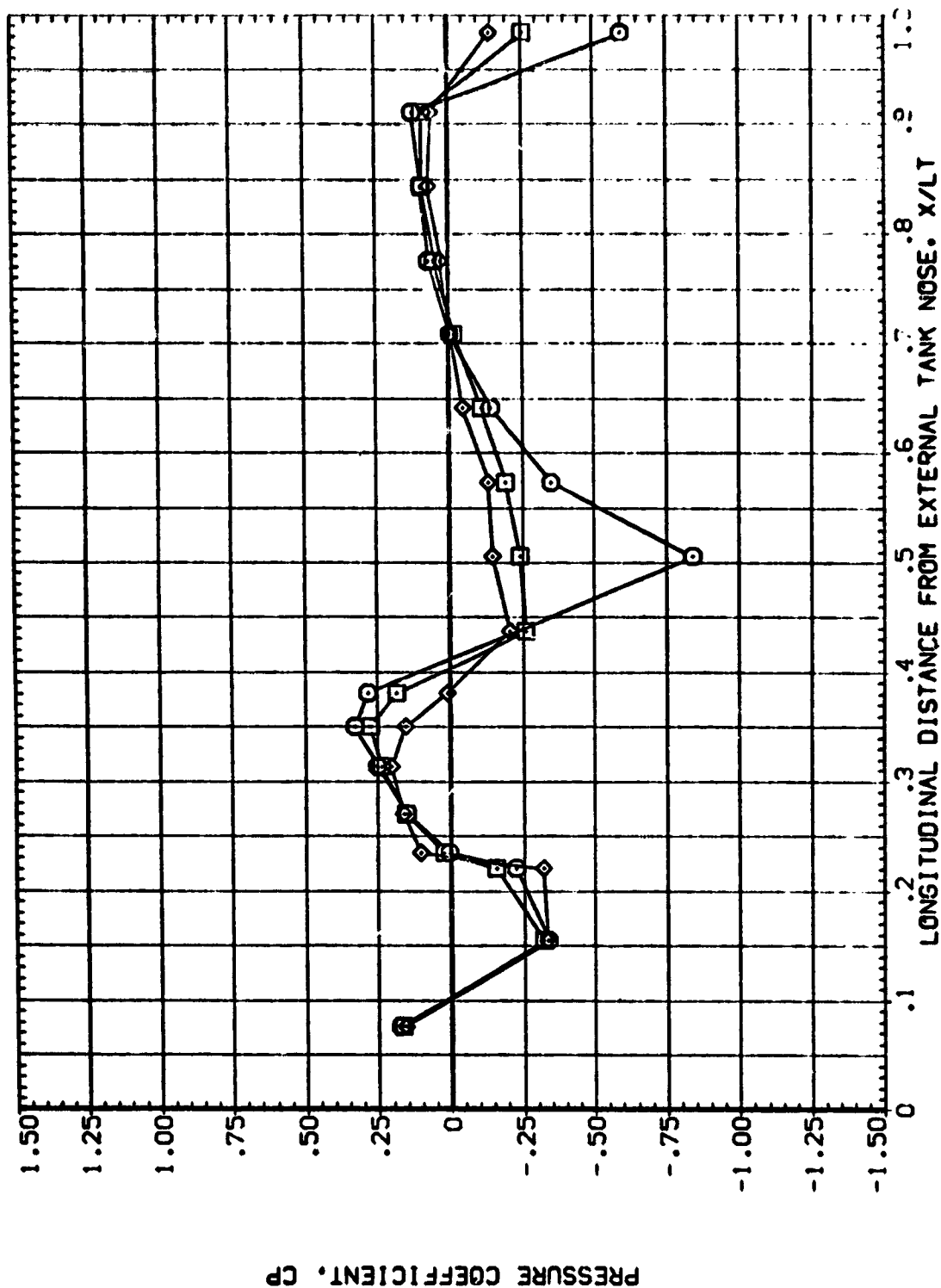
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□	324.000	-8.000	.900	6.198	5.313	5.313	2.549	DELTA Z	.000	.40	.000
◇	360.000							X-SRB	.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

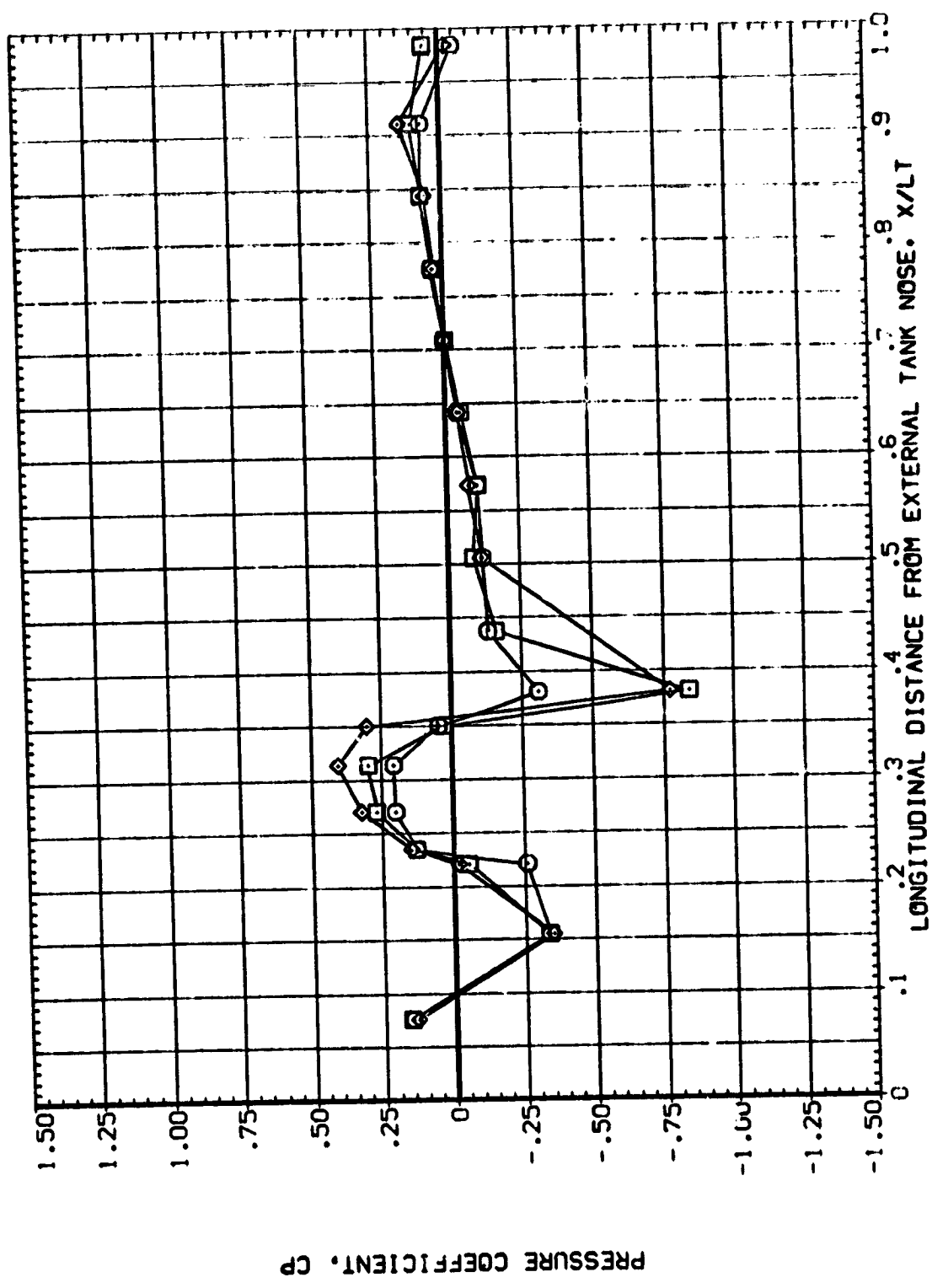
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□	.000	.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	R.000	.000
◇	18.000							IN.	X-SRB	CRB INC	.500
	36.000							IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

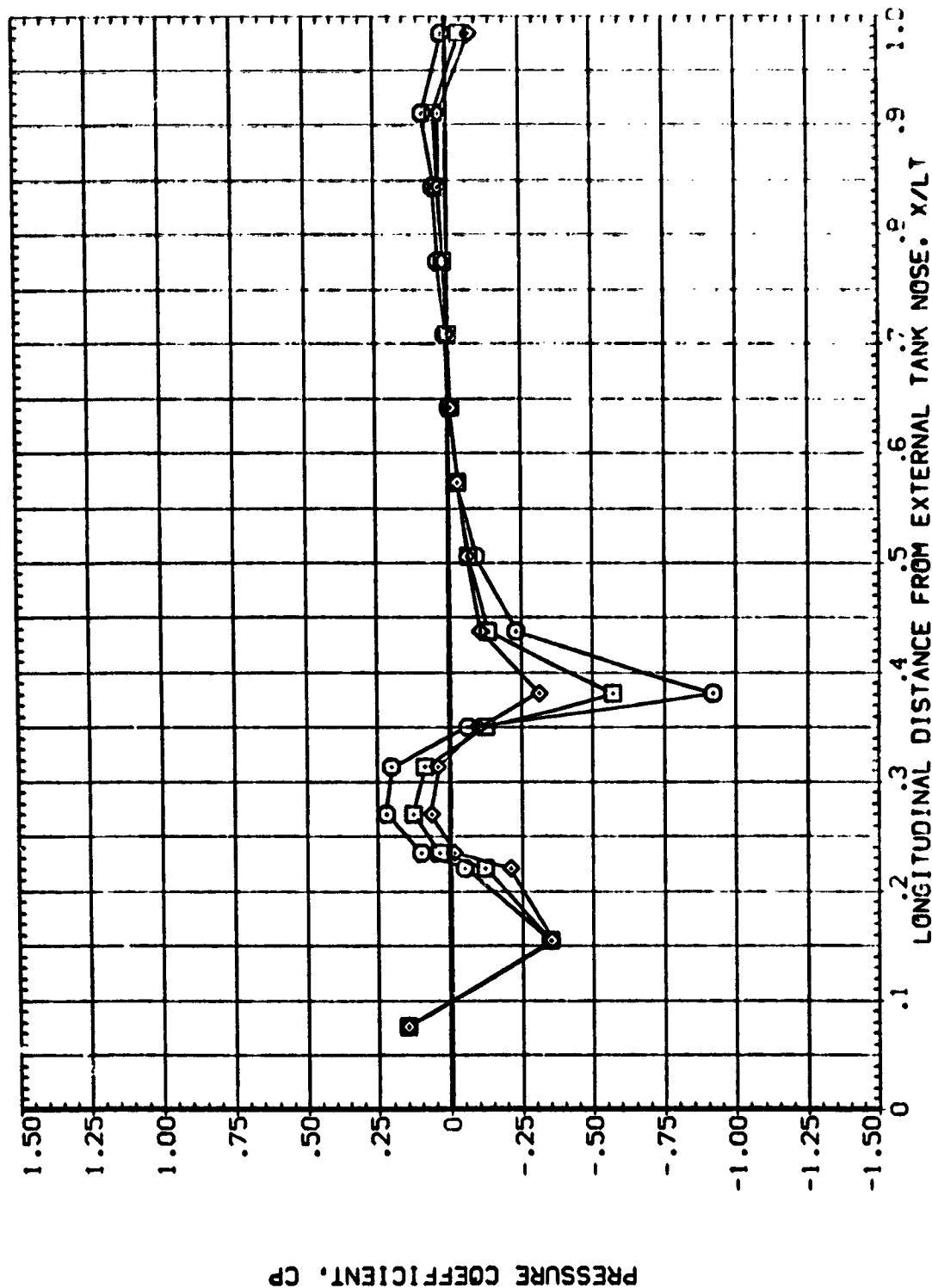
REFERENCE DATA			PARAMETRIC VALUES		
PHI	ALPHA	MACH	SREF	BETA	CONFIS
54.000	.000	.900	6.198	DELTA Z	.000
72.700			5.313	X-SRB	.000
90.000			2.549		.500
			YMRP		
			ZMRP		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	SO. IN.	BETA	CONF IG	90.000
○	108.000	.000	.900	5.198	5.313	5.313	2.549	IN.	DELTA Z	RUEER	.000
□	126.000							IN.	X-S98	D981NC	.000
◇	144.000							IN.			.500

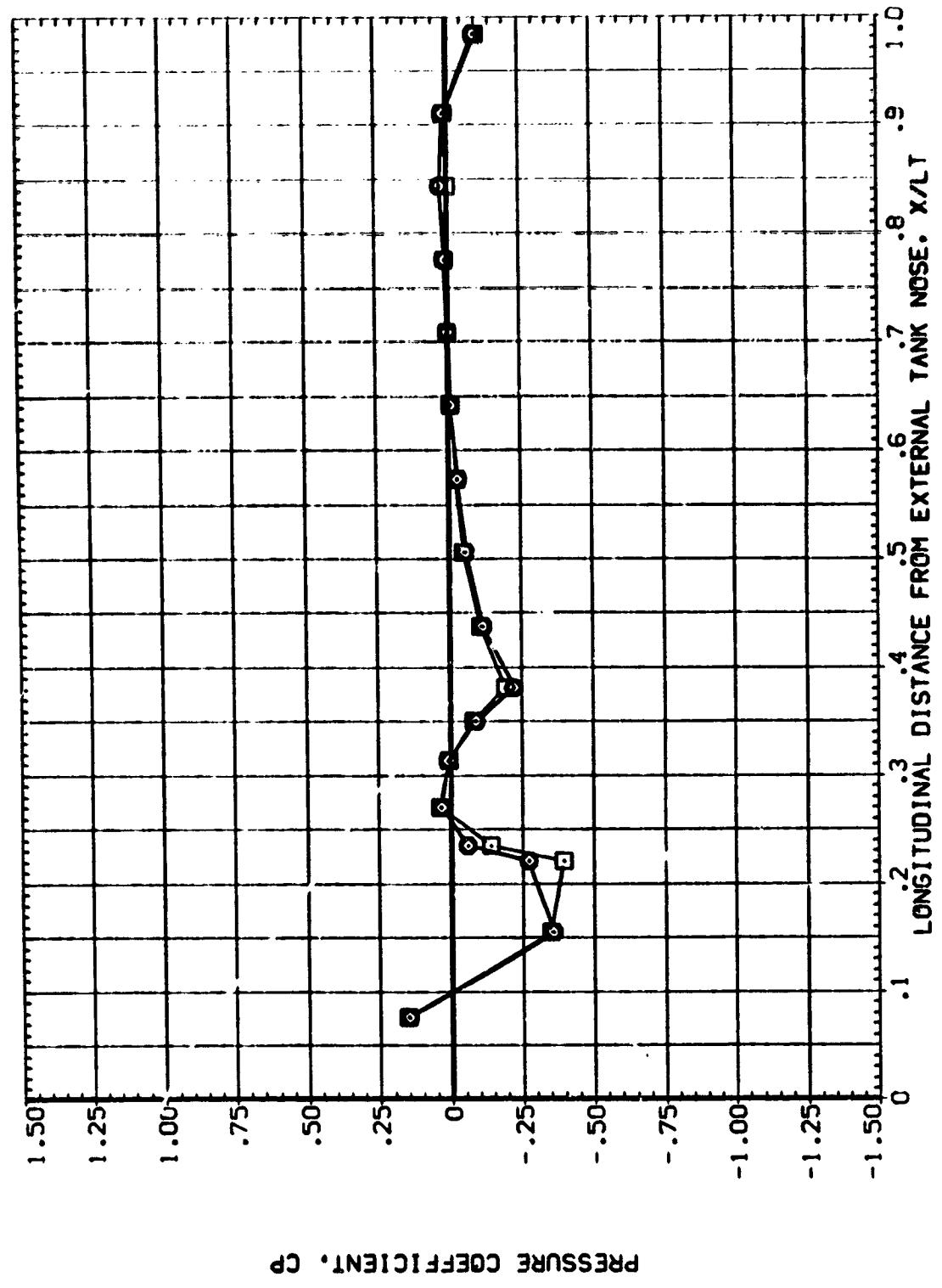


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82101)

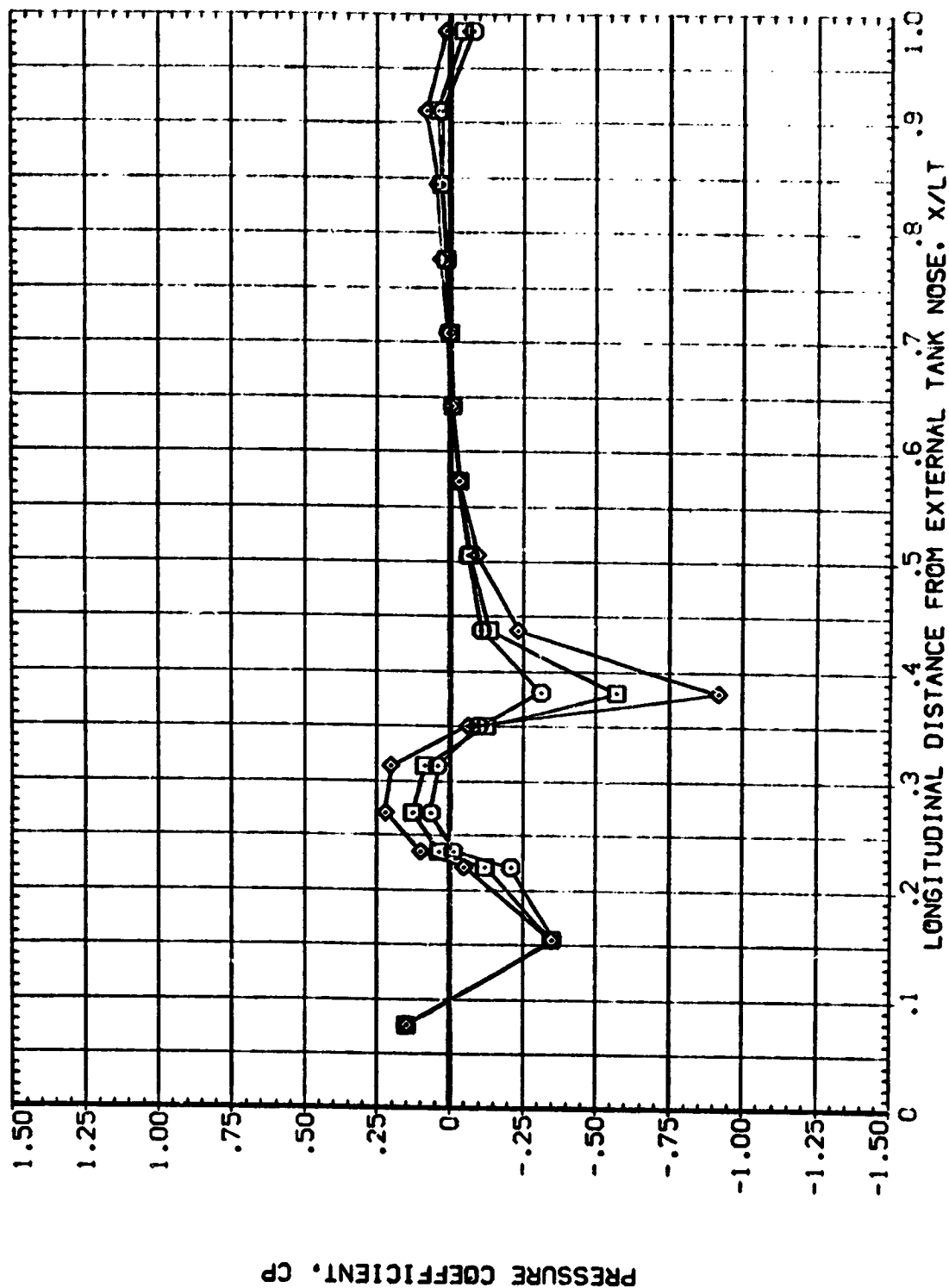
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○	180.000		.000	.900	5.313	5.313	5.313	2.549	.000	.000	IN.	DELTA Z	.140	RUDER
□	196.000										IN.	K-SRB	.000	SRB INC
◇											IN.			.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	BETA	CONF IG	RUDDER	ORBITAL
○	216.000	.000	.900	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	234.000							X-SRB			
◇	252.000										

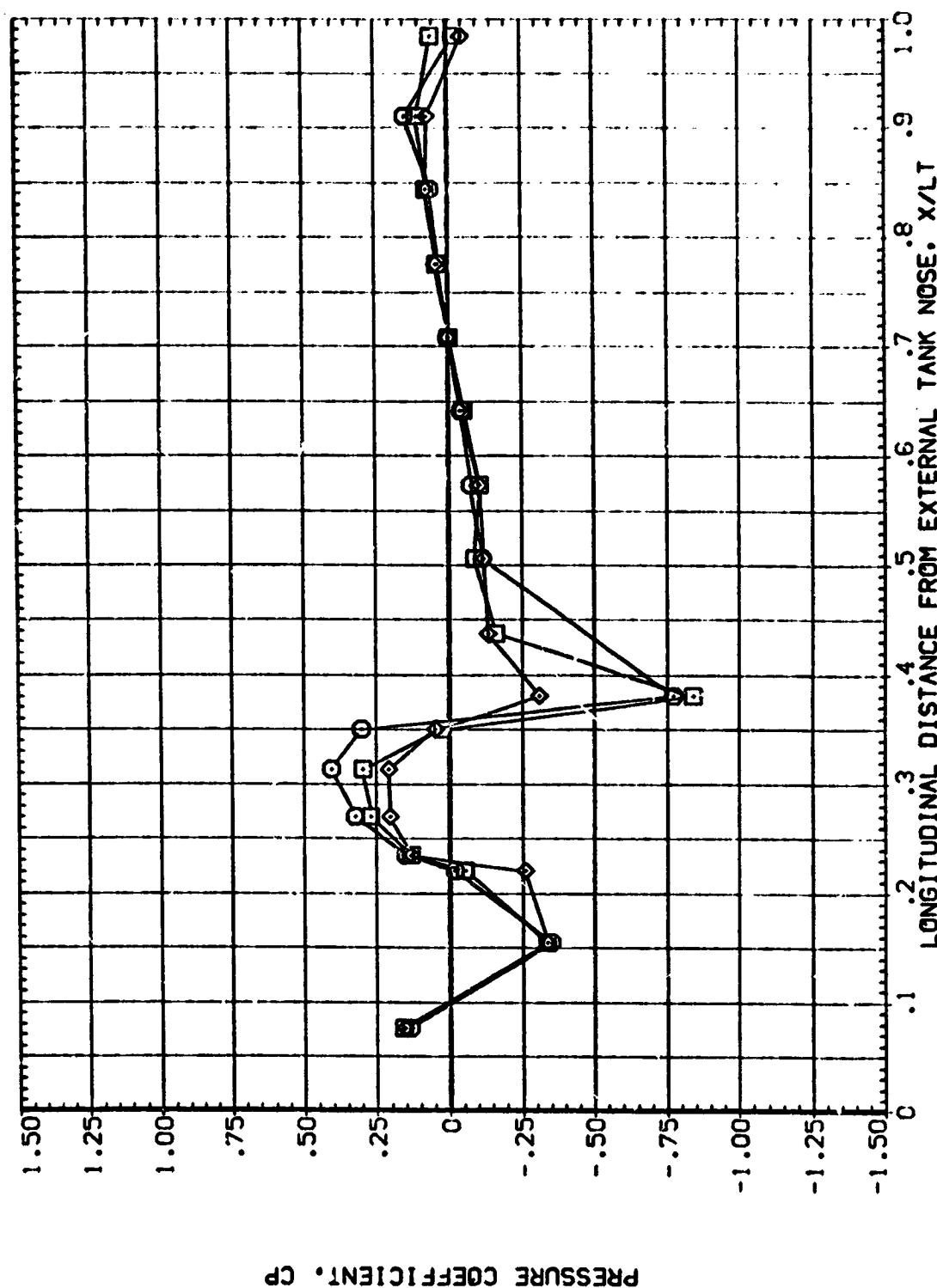


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

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				SREF	LREF	BREF	XMRP	BETA	CONFIG	RUDDER	CRBINC
○	270.000	.000	.900	6.198	5.313	5.313	2.549	DELTAZ	.000	.140	.000
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◇	306.000										.000

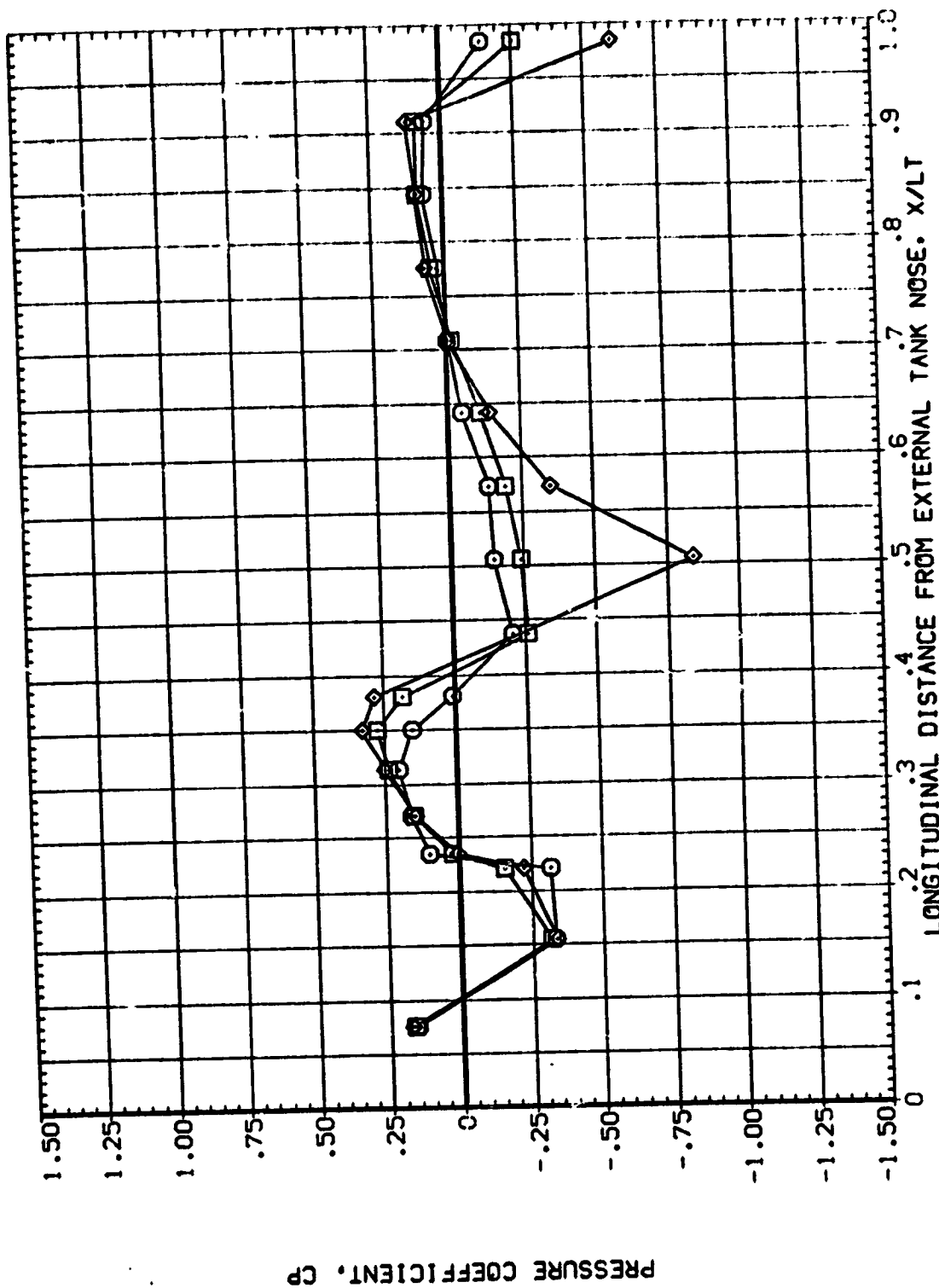


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

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342.000			LREF 5.313	.140	RUDER .000
360.000			BREF 5.313	.000	CSBINC .500
			XMRP 2.549		
			YMRP .000		
			ZMRP .000		

SYMBOL  
 ○  
 □  
 ◇



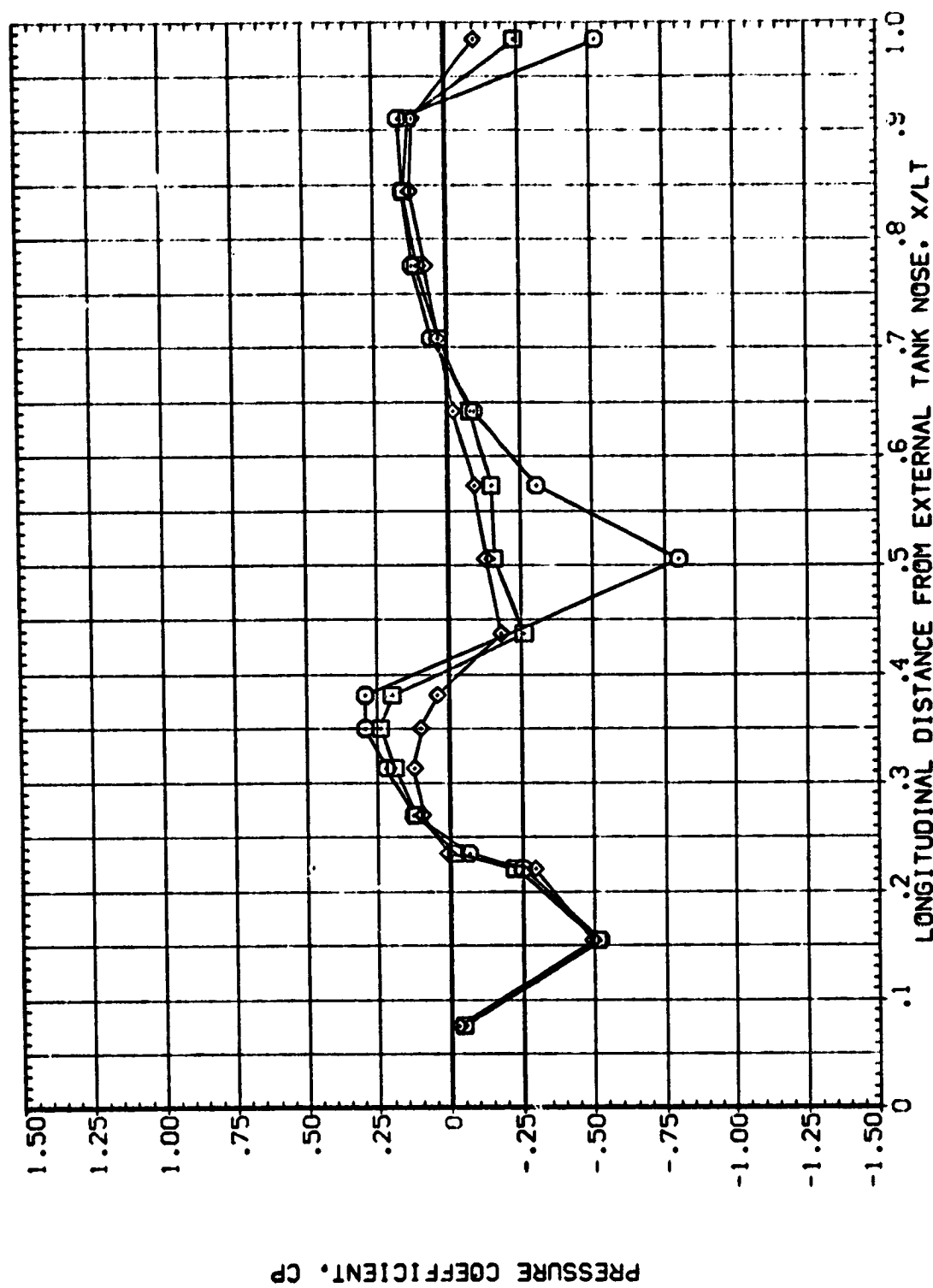
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





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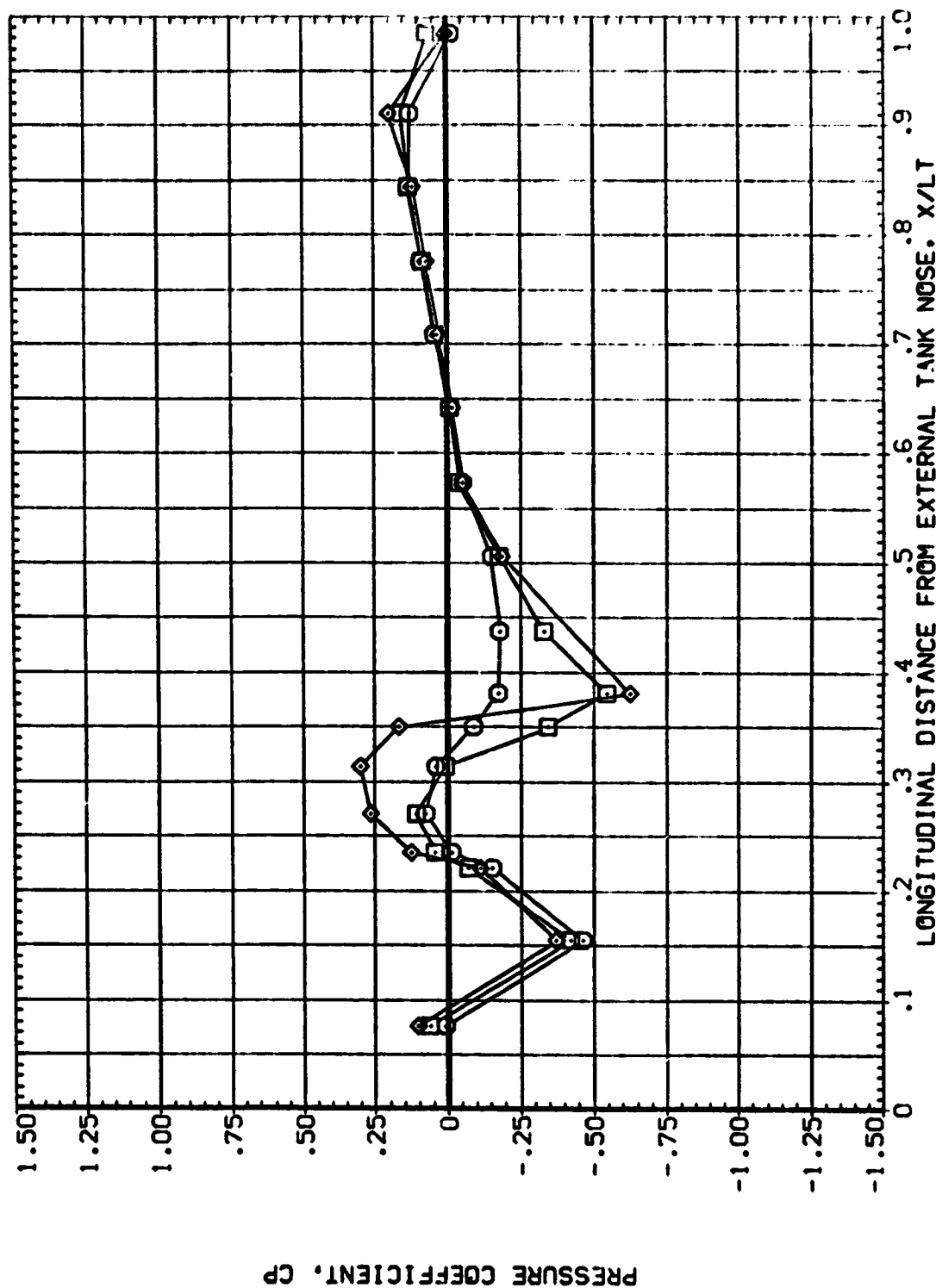
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○																													
□																													
◇																													



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

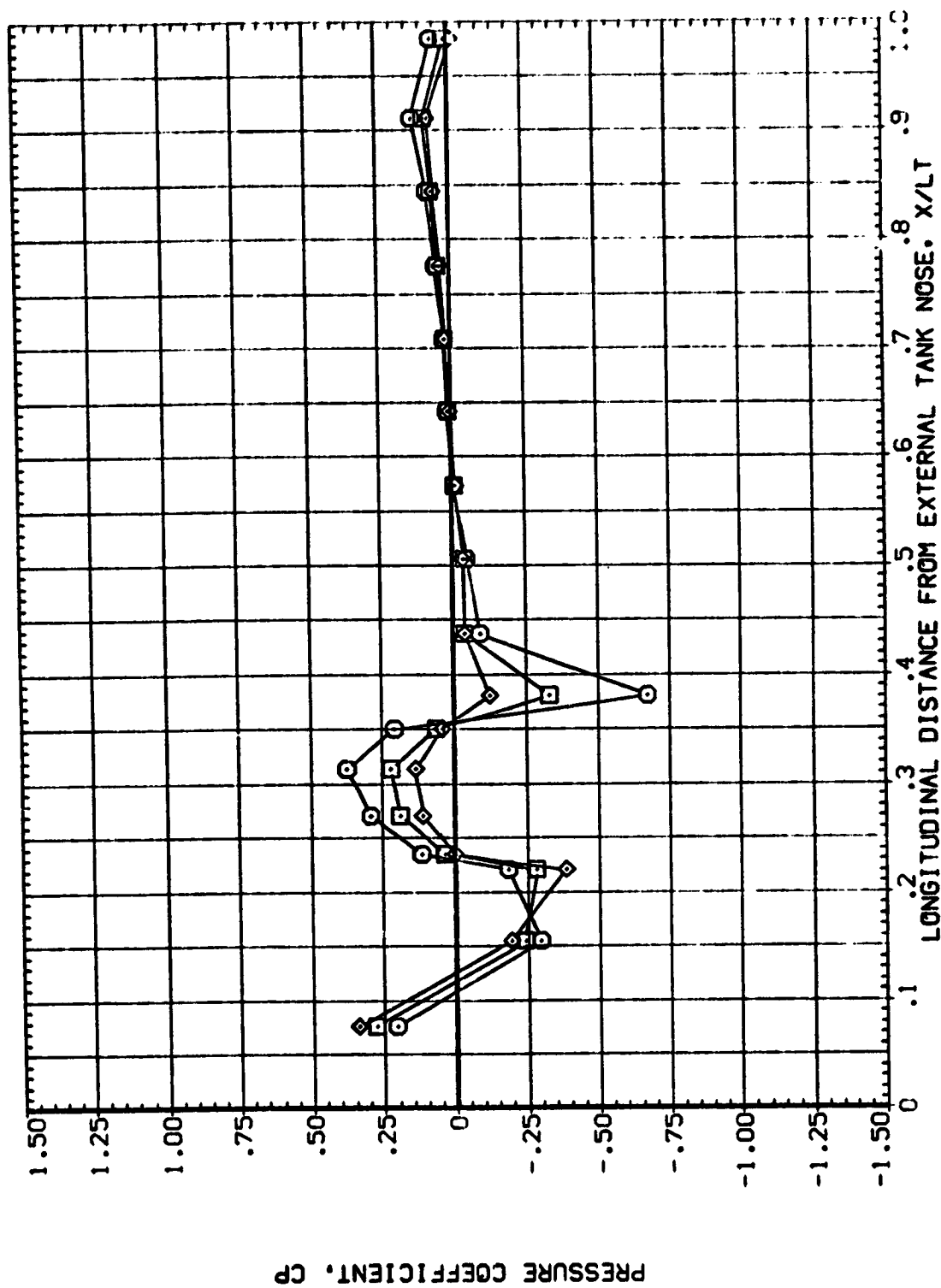
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□	72.000			LREF 5.313	DELTA Z	.000
◇	90.000			BREF 5.313	RUDDER	.000
				XMRP 2.549	X-SRB	.000
				YMRP .000	ORBITAL	.500
				ZMRP .000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

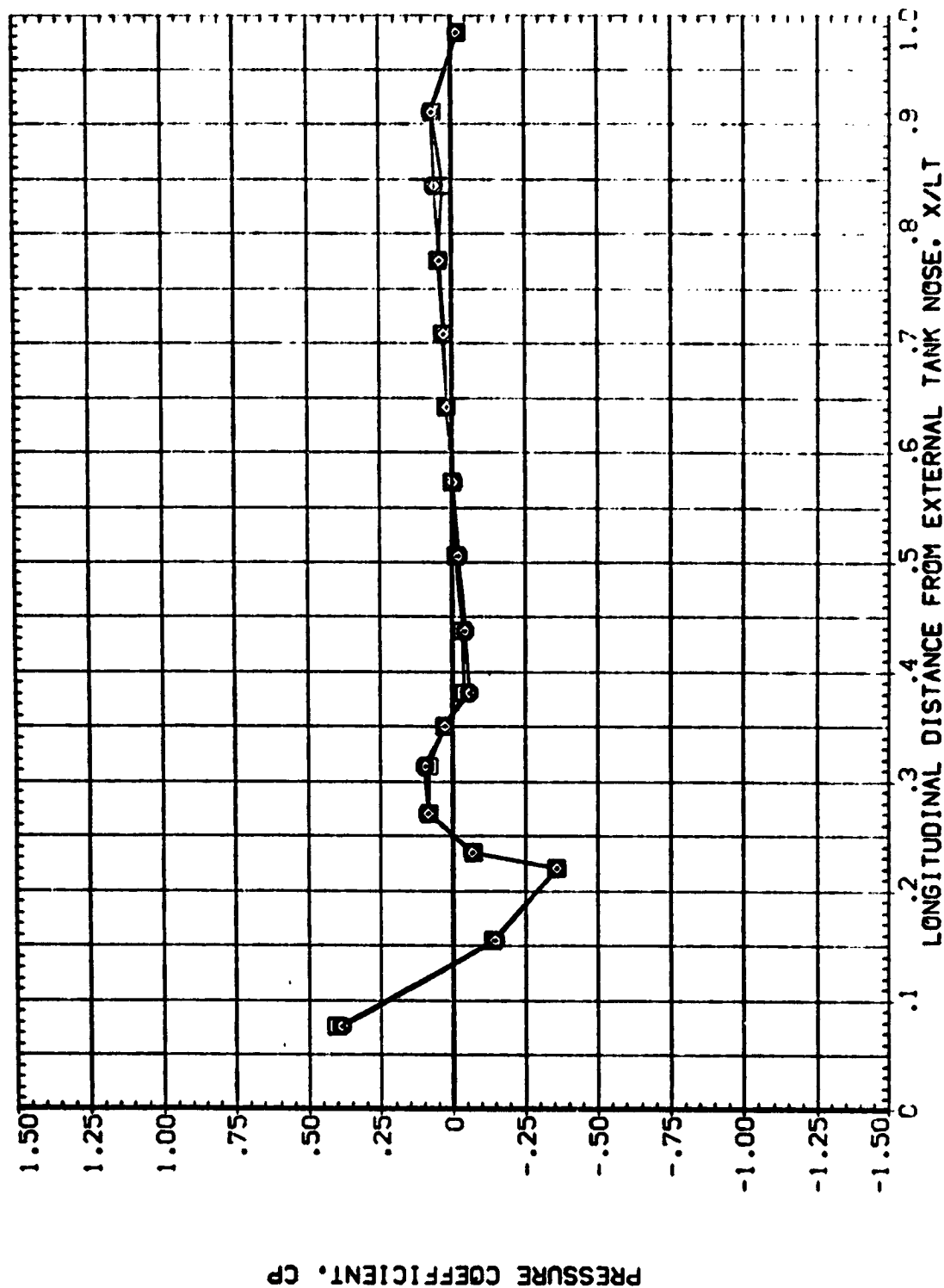
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	BETA	CONF IG	
○	108.000	8.000	.900	6.198	DELTA Z	.000	90.000
□	126.000			5.313	X-SRB	.140	.000
◇	144.000			2.549		.000	.500
				YMRP			
				ZMRP			

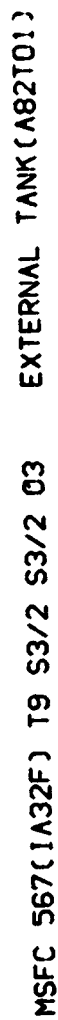


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA	90 IN.	BETA	DELTA Z	X-SUB	PARAMETRIC VALUES
<input type="checkbox"/>	182.000	9.000	.500	9.199	9.199	.000	.000	.000	CONF IG
<input type="checkbox"/>	180.000			9.239	9.239	.140	.000	.000	FLUDDR
<input type="checkbox"/>	180.000			9.279	9.279	.000	.000	.000	CRBINC
<input type="checkbox"/>	198.000			.000	.000	.000	.000	.000	
				9.319	9.319	.000	.000	.000	
				9.359	9.359	.000	.000	.000	
				9.399	9.399	.000	.000	.000	
				9.439	9.439	.000	.000	.000	
				9.479	9.479	.000	.000	.000	
				9.519	9.519	.000	.000	.000	
				9.559	9.559	.000	.000	.000	
				9.599	9.599	.000	.000	.000	
				9.639	9.639	.000	.000	.000	
				9.679	9.679	.000	.000	.000	
				9.719	9.719	.000	.000	.000	
				9.759	9.759	.000	.000	.000	
				9.799	9.799	.000	.000	.000	
				9.839	9.839	.000	.000	.000	
				9.879	9.879	.000	.000	.000	
				9.919	9.919	.000	.000	.000	
				9.959	9.959	.000	.000	.000	
				10.000	10.000	.000	.000	.000	



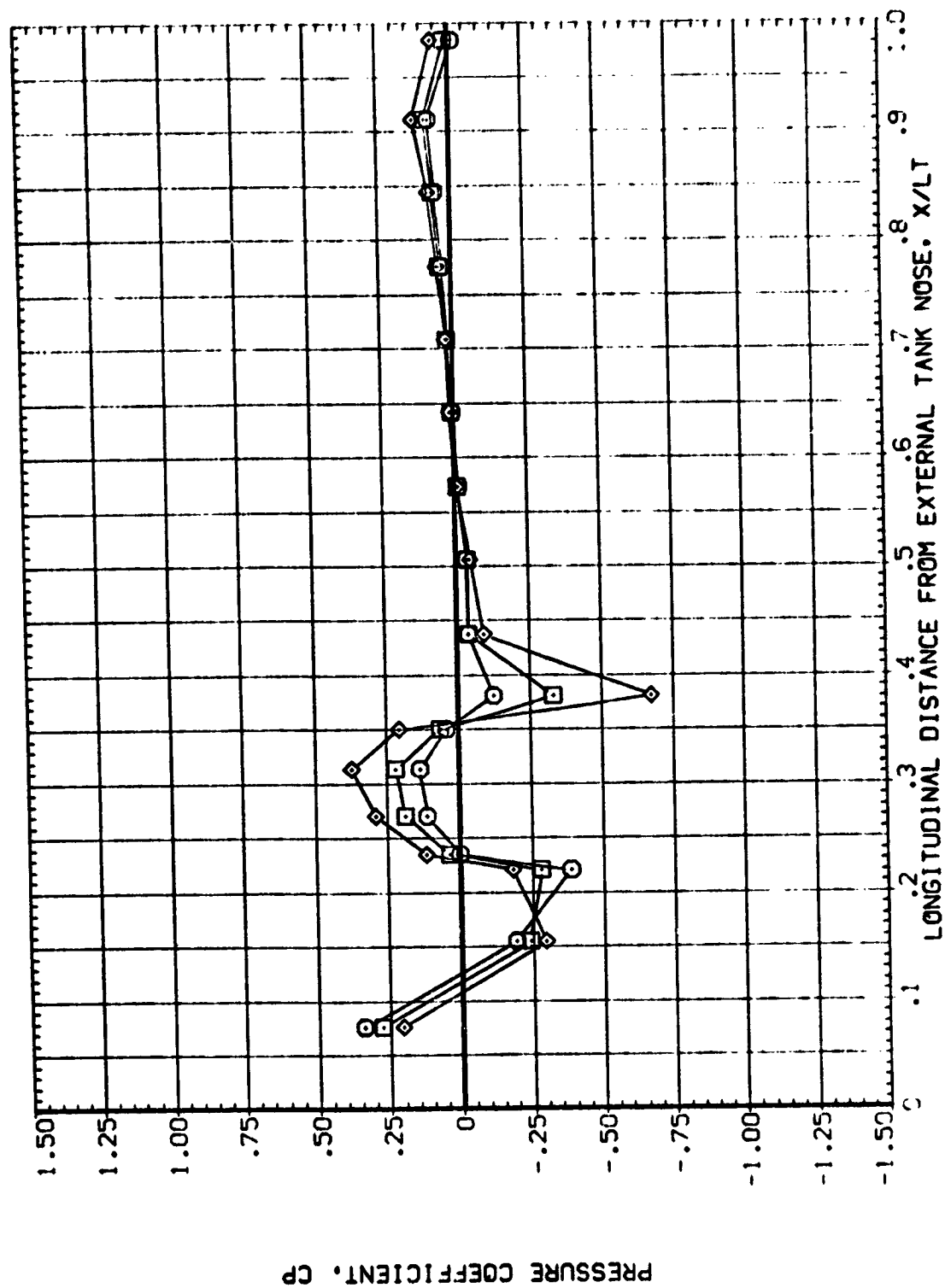
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



SYMBOLS

PHI	ALPHA	MACH
216.000	8.000	.900
234.000		
252.000		

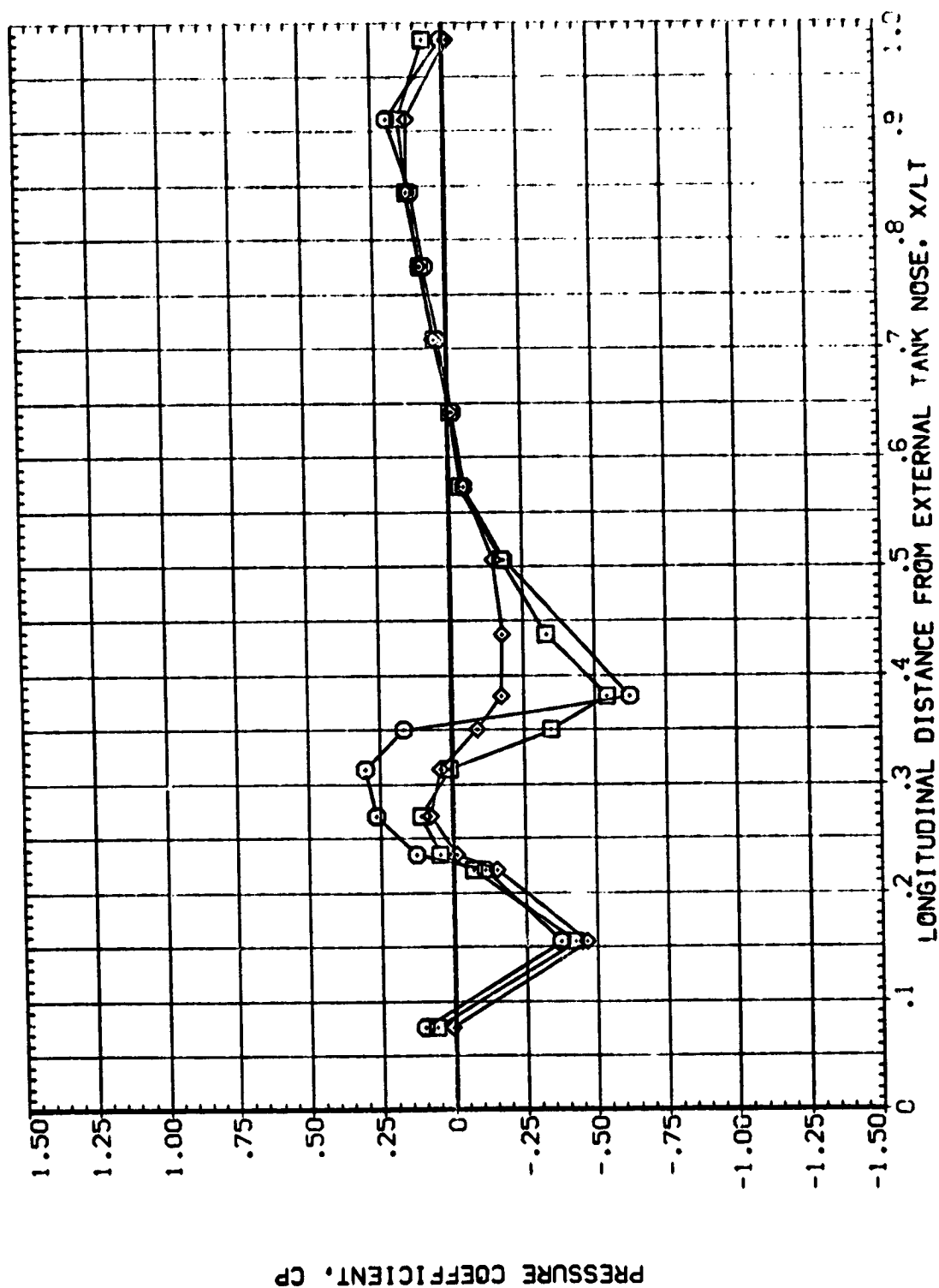
REFERENCE DATA		PARAMETRIC VALUES	
SREF	6.198	BETA	.000
LREF	5.313	DELTAZ	.14C
BREF	5.313	X-SRB	.000
XMRP	2.549		
YMRP	.000		
ZMRP	.000		
		CONF IG	90.00C
		RODDER	.00C
		CSBINC	.50C



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				SQ. IN.	BETA	CONF IG	PARAMETRIC VALUES
				SREF	6.198	IN.	DELTA Z				
○	27C.000	8.000	.500	LREF	5.313	IN.					
□	288.000			BREF	5.313	IN.					
◇	305.000			XMRP	2.549	IN.					
				YMRP	.000	IN.					
				ZMRP	.000	IN.					

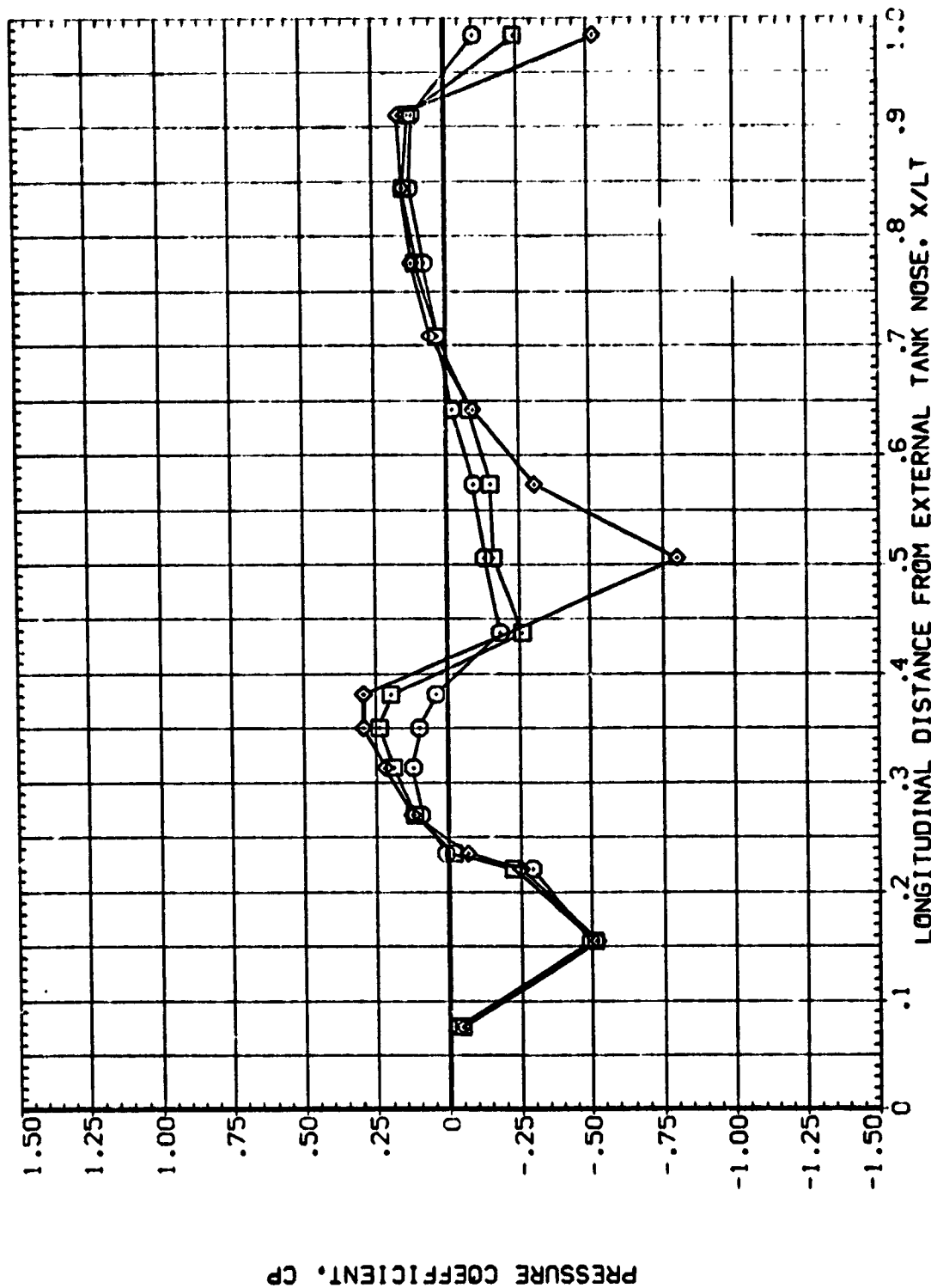


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

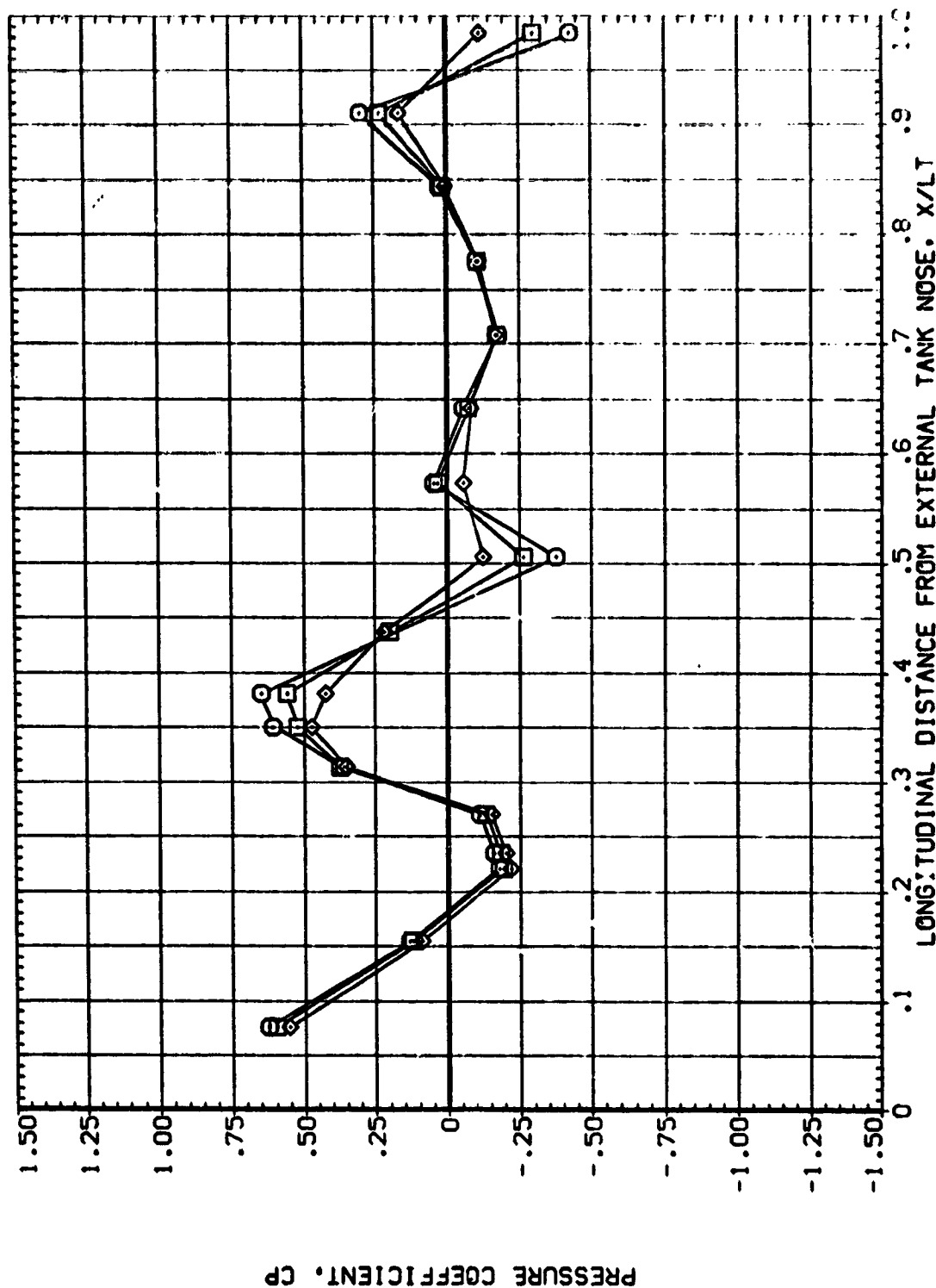
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONFIG	90.000
○	324.000	8.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
□	342.000							IN.	X-SRB	ORGINC	.500
◇	360.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	PHI		ALPHA	MACH	REFERENCE DATA			BETA			PARAMETRIC VALUES	
	.000	18.000	-8.000	1.250	SREF	6.198	50. IN.	BETA	.000	CONF'G	90.000	
○					LREF	5.313	IN.	DELTAZ	.140	RUCR	.000	
□	18.000				BREF	5.313	IN.	X-SRB	.000	ORBINC	.500	
◇	36.000				XMRP	2.549	IN.					
					YMRP	.000	IN.					
					ZMRP	.000	IN.					



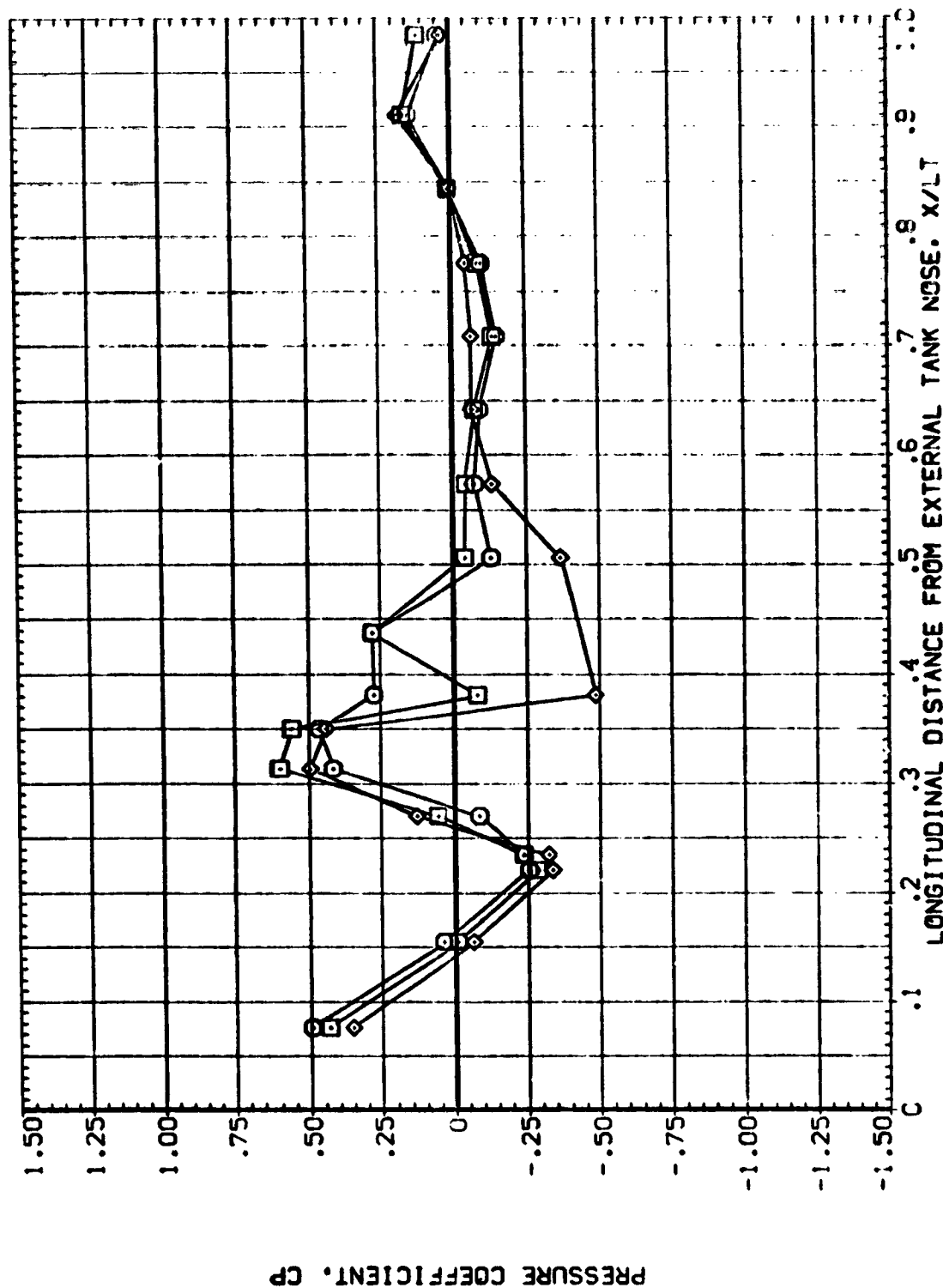
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

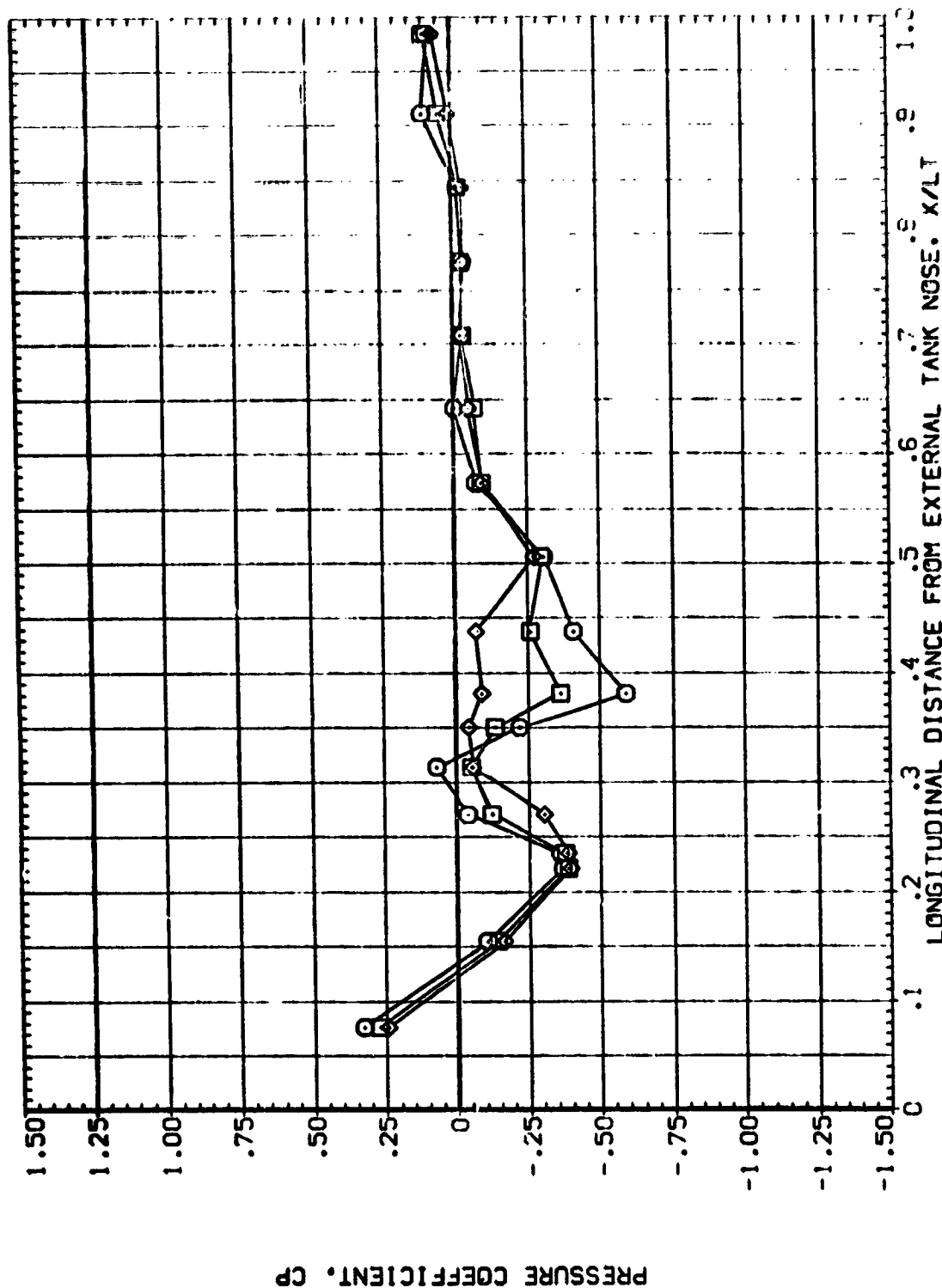
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	BETA	CONFIS	CONFIS
□	54.000	-8.000	1.250	6.198	5.313	5.313	2.549	.000	DELTA Z	.000	.000
◇	72.000								X-SPB	.000	.000
◇	90.000									.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

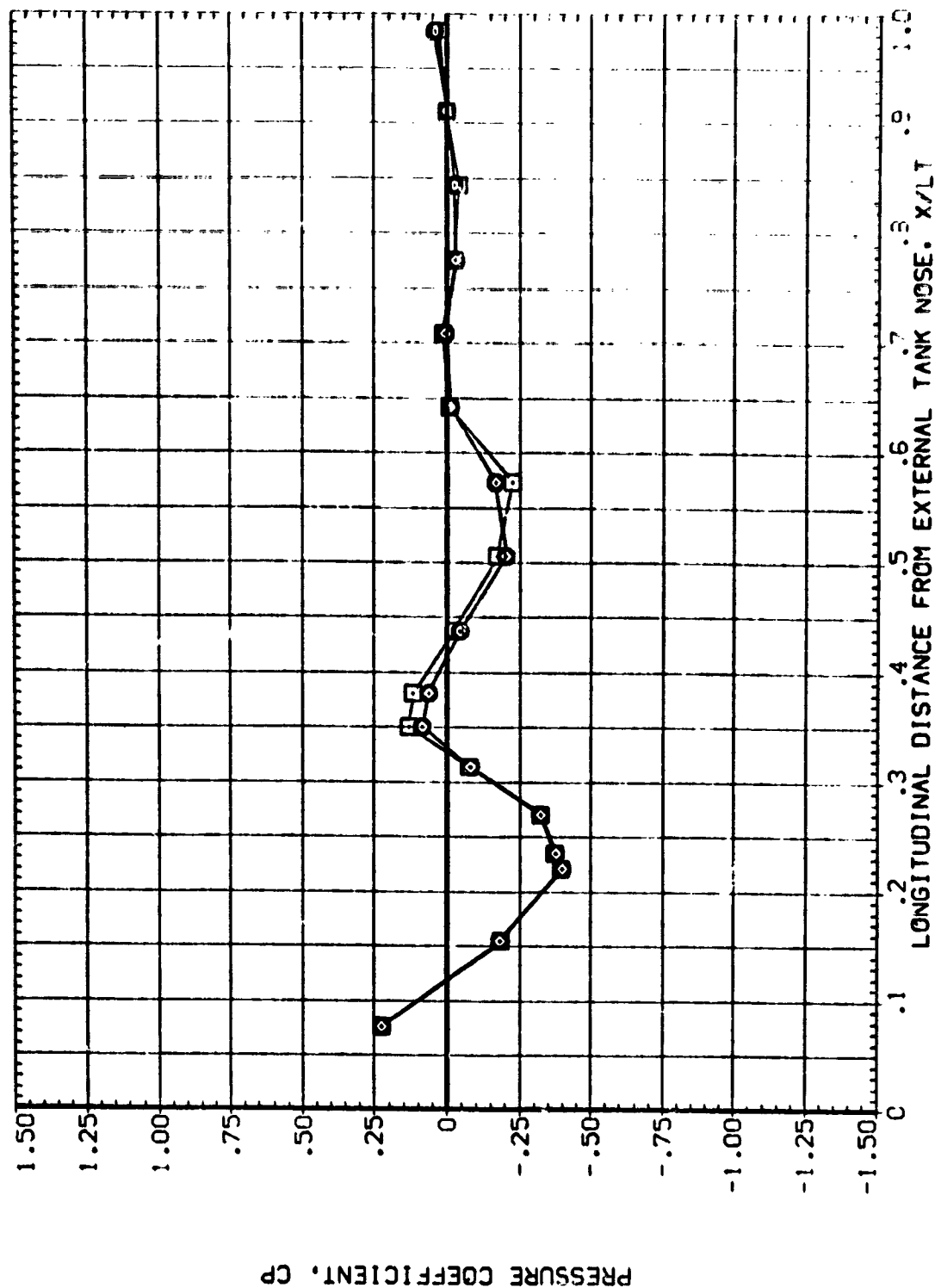
SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA		BETA		PARAMETRIC VALUES	
	108.000	126.000	-8.000	1.250			SREF	6.198	SO. IN.	.000	CONFIG	90.000
○							LREF	5.313	IN.	.143	RUDER	.000
□							BREF	5.313	IN.	.000	DBRINC	.500
◇							XREF	2.549	IN.	.000		
							YREF	.000	IN.			
							ZREF	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

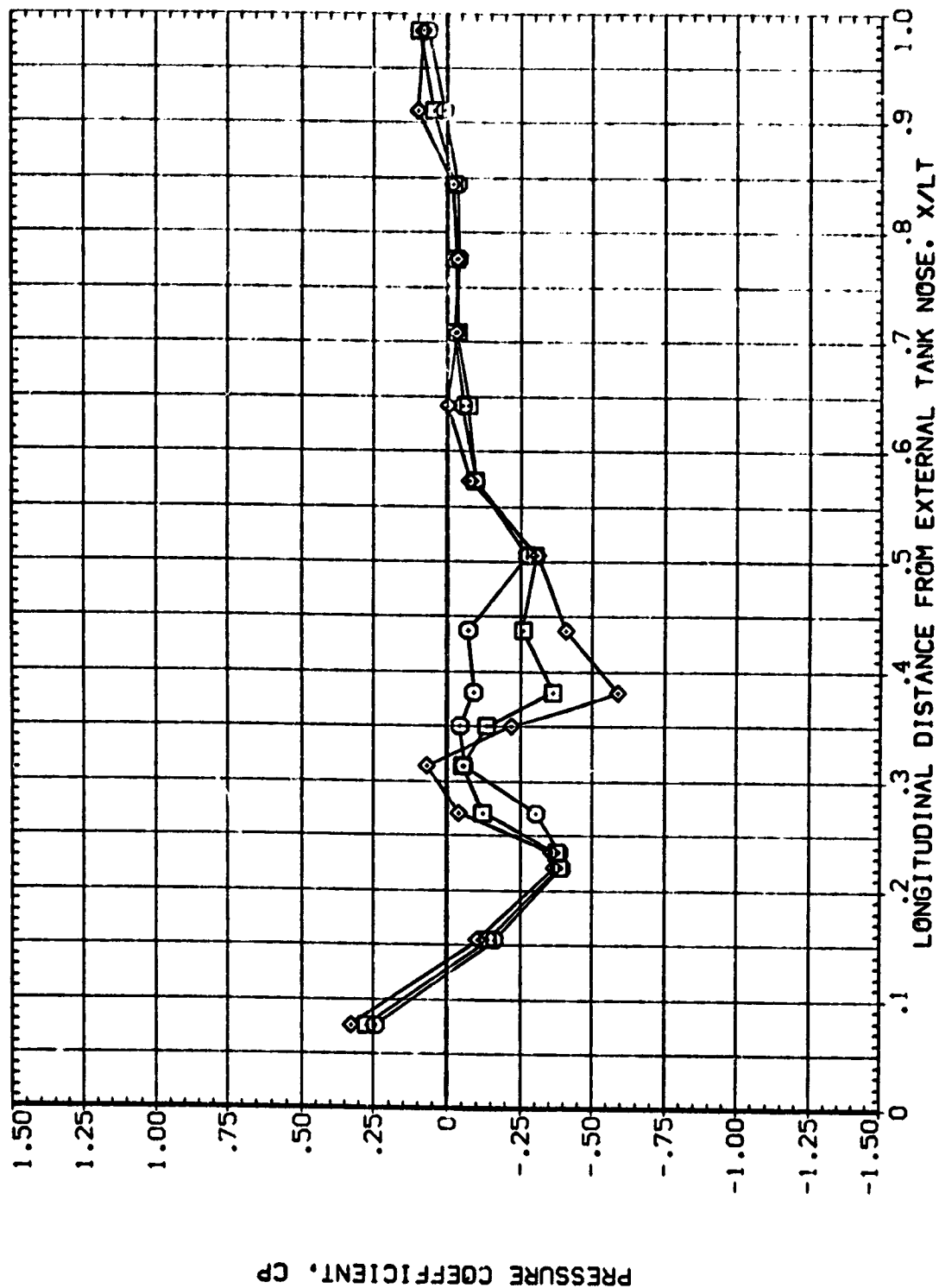
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		BETA	PARAMETRIC VALUES	
				SREF	6.198		.000	CONF TIS
□	162.000	-8.000	1.250	LREF	5.313	DEI TAZ	.000	P-DOOR
□	180.000			BREF	5.313	X-SRB	.000	95811C
◇	198.000			XPRP	2.549		.000	
				YPRP	.000			
				ZPRP	.000			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

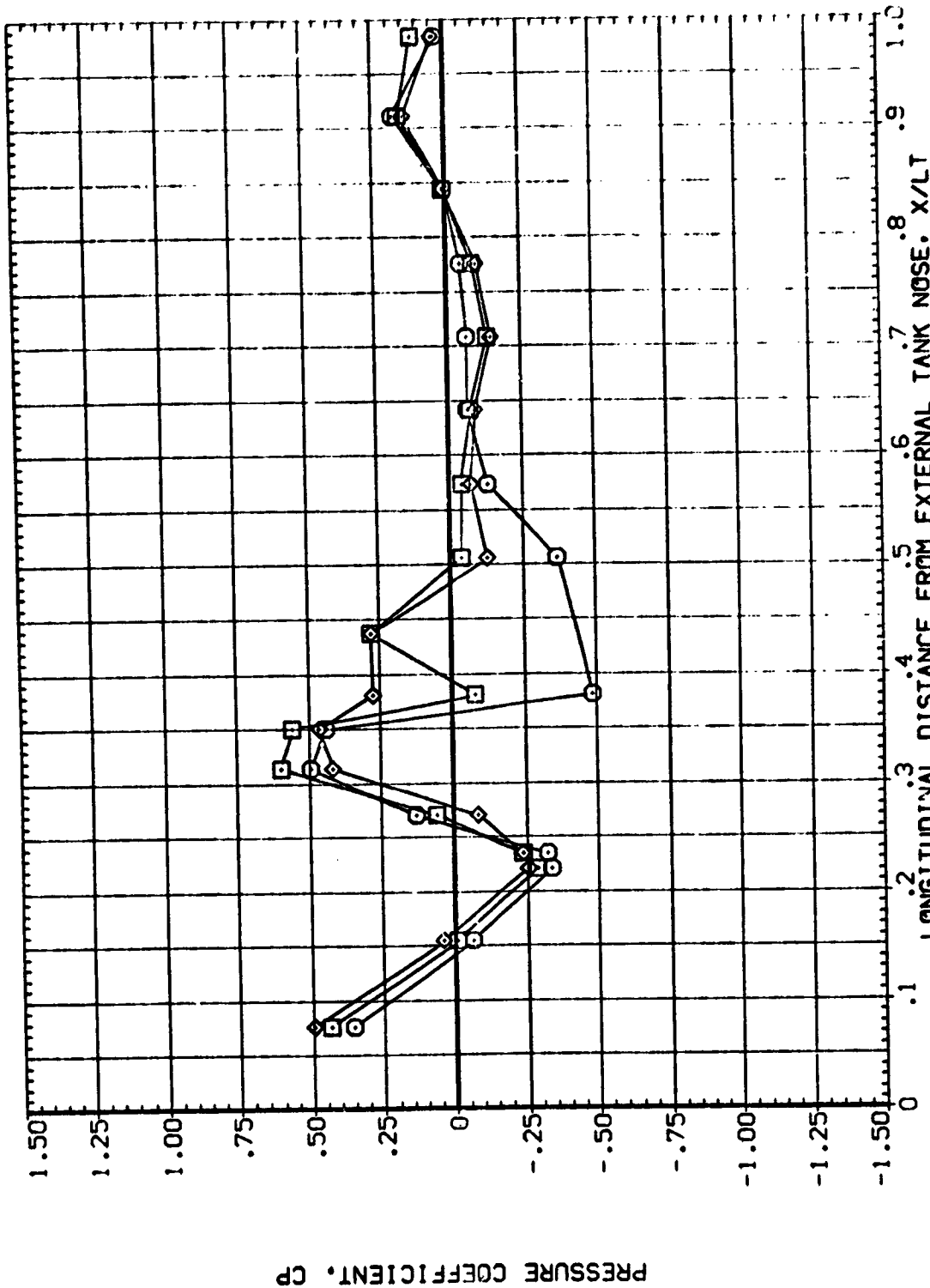
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	216.000	-8.000	1.250	SREF 6.198	CCF IG 90.000
□	234.000			LREF 5.313	.000 RUDER .000
◇	252.000			BREF 5.313	.140 RUDER .000
				XPRP 2.549	.000 DRG INC .500
				YPRP .000	
				ZPRP .000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

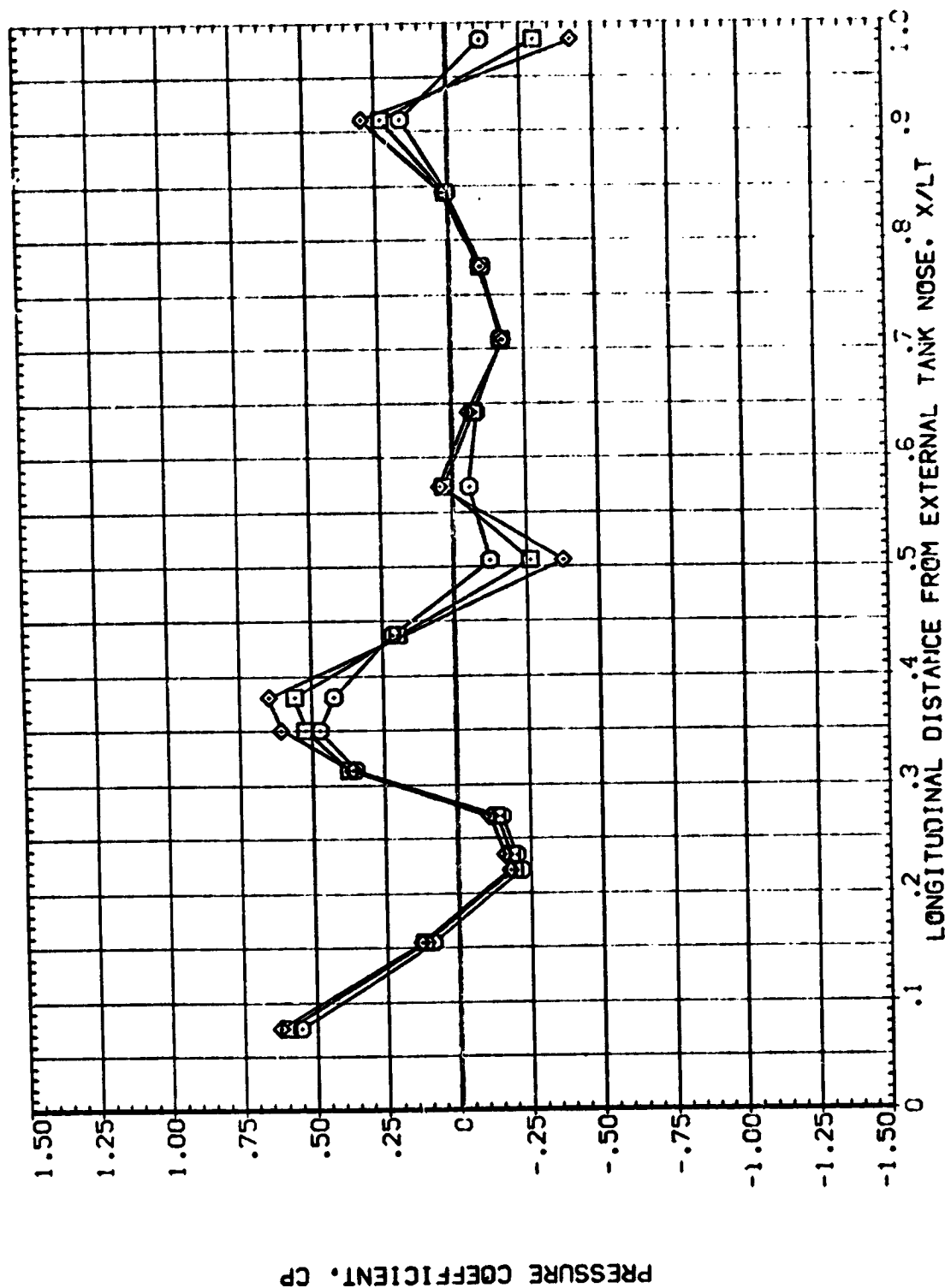
SYMBOL	REFERENCE DATA		PARAMETRIC VALUES	
	PHI	ALPHA	BETA	DELTA Z
○	270.000	-8.000	.000	.000
□	288.000	1.250	.140	.000
◇	306.000		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

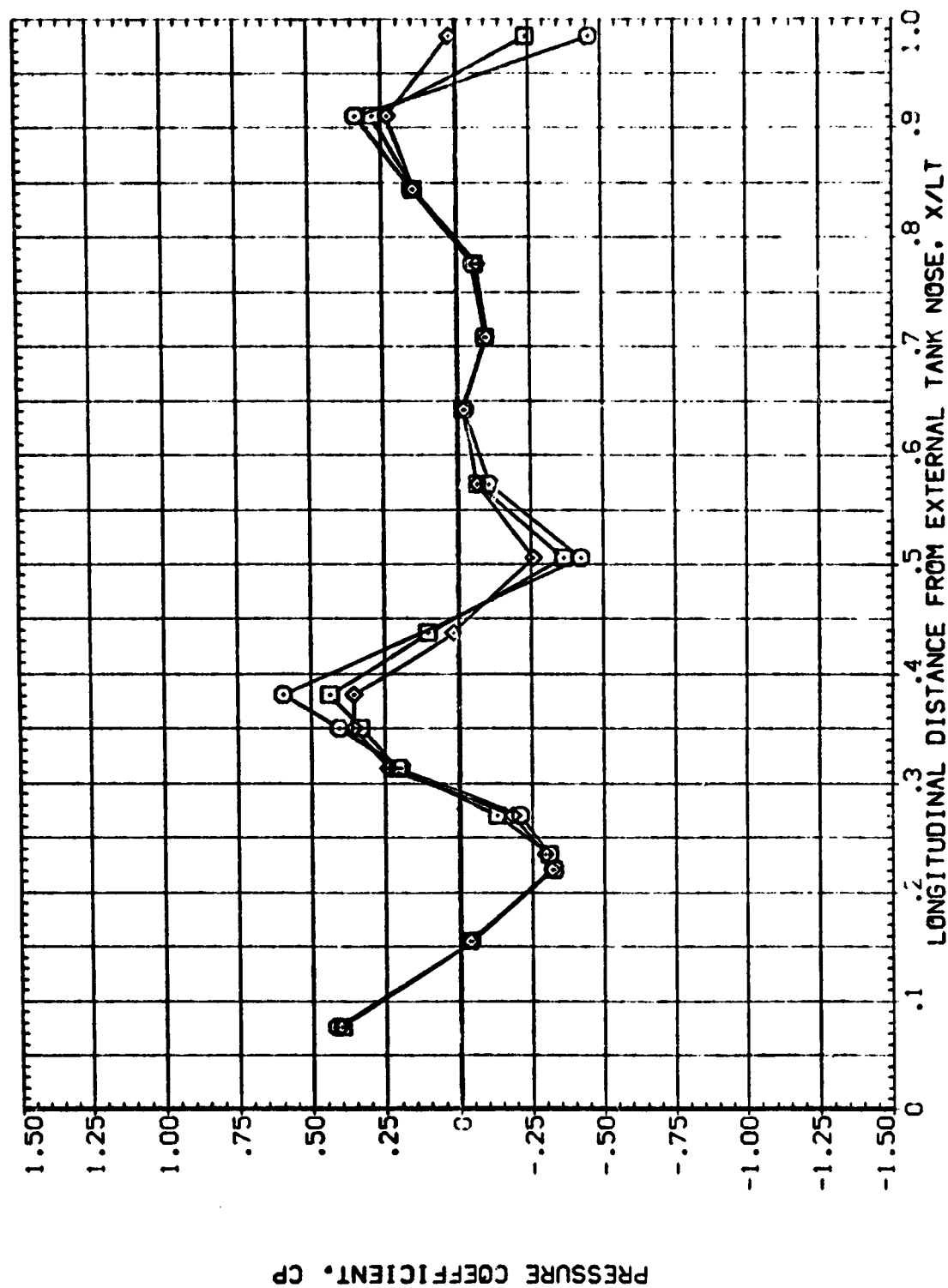
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	RODDER	ORBIT NC
◇	324.000	-8.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	342.000							X-SRB	.000	.000	.500
◇	360.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

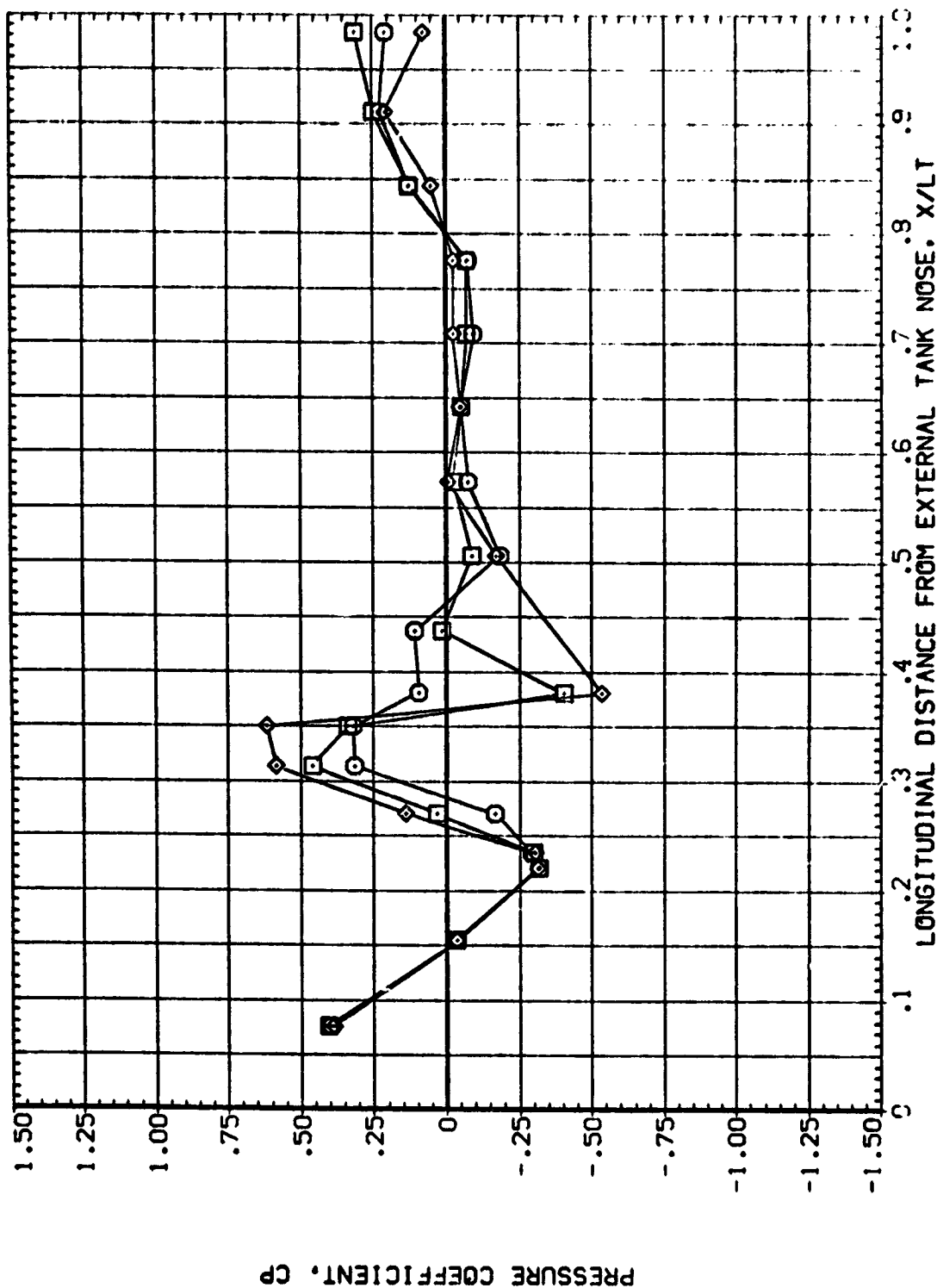
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	DELTA Z	CONV T6	R00DER
○	.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.000
□	18.000	.000	1.250	5.313	5.313	5.313	2.549	.000	.140	.000	.000
◇	36.000	.000	1.250	2.549	2.549	2.549	2.549	.000	.140	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

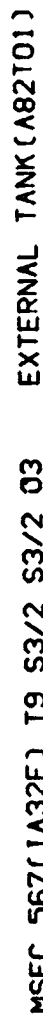
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	SQ. IN.	BETA
○	54.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.000	IN.	DELTA Z
□	72.000									IN.	X-SRB
◇	90.000									IN.	ORBITAL

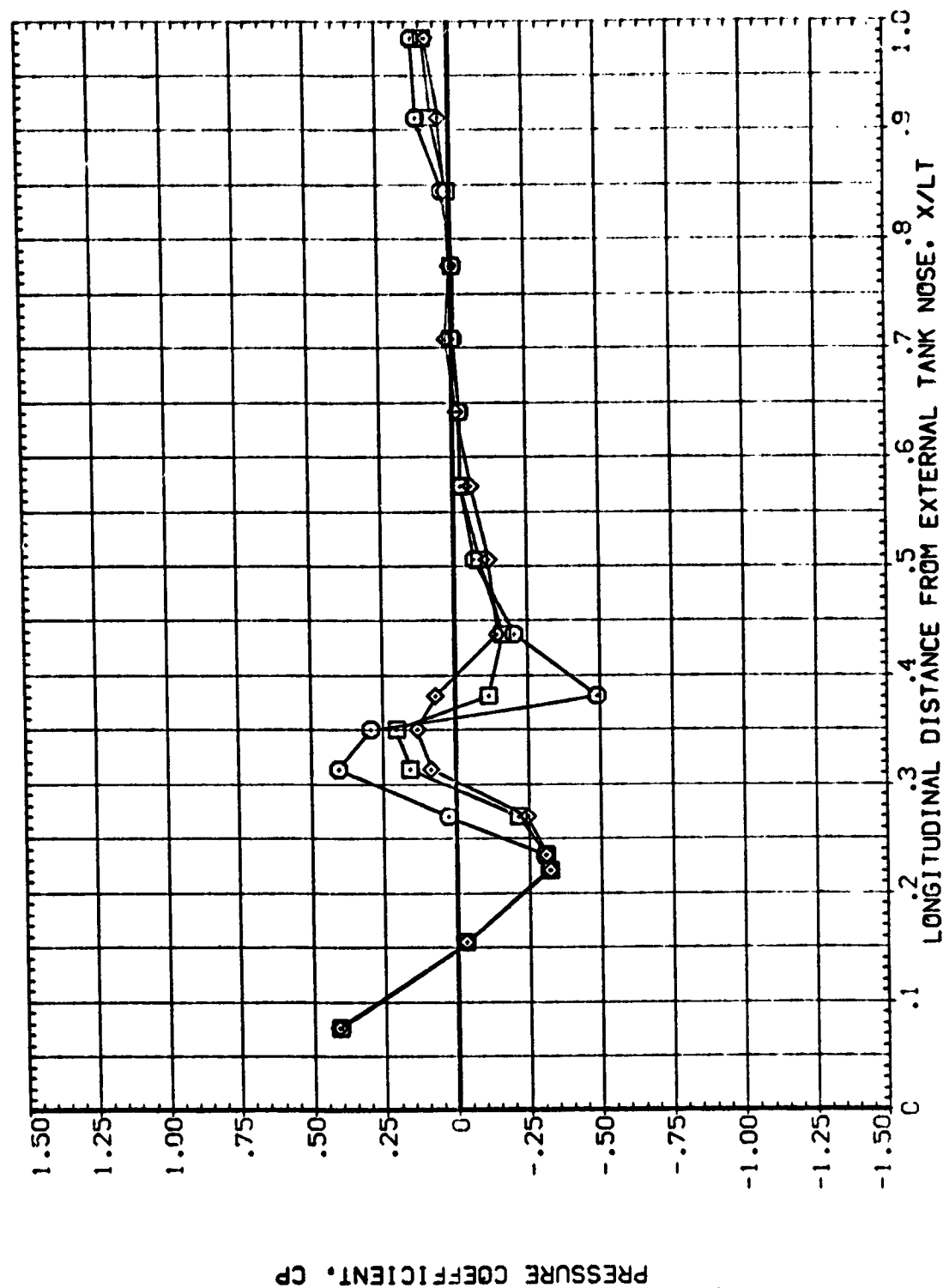


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





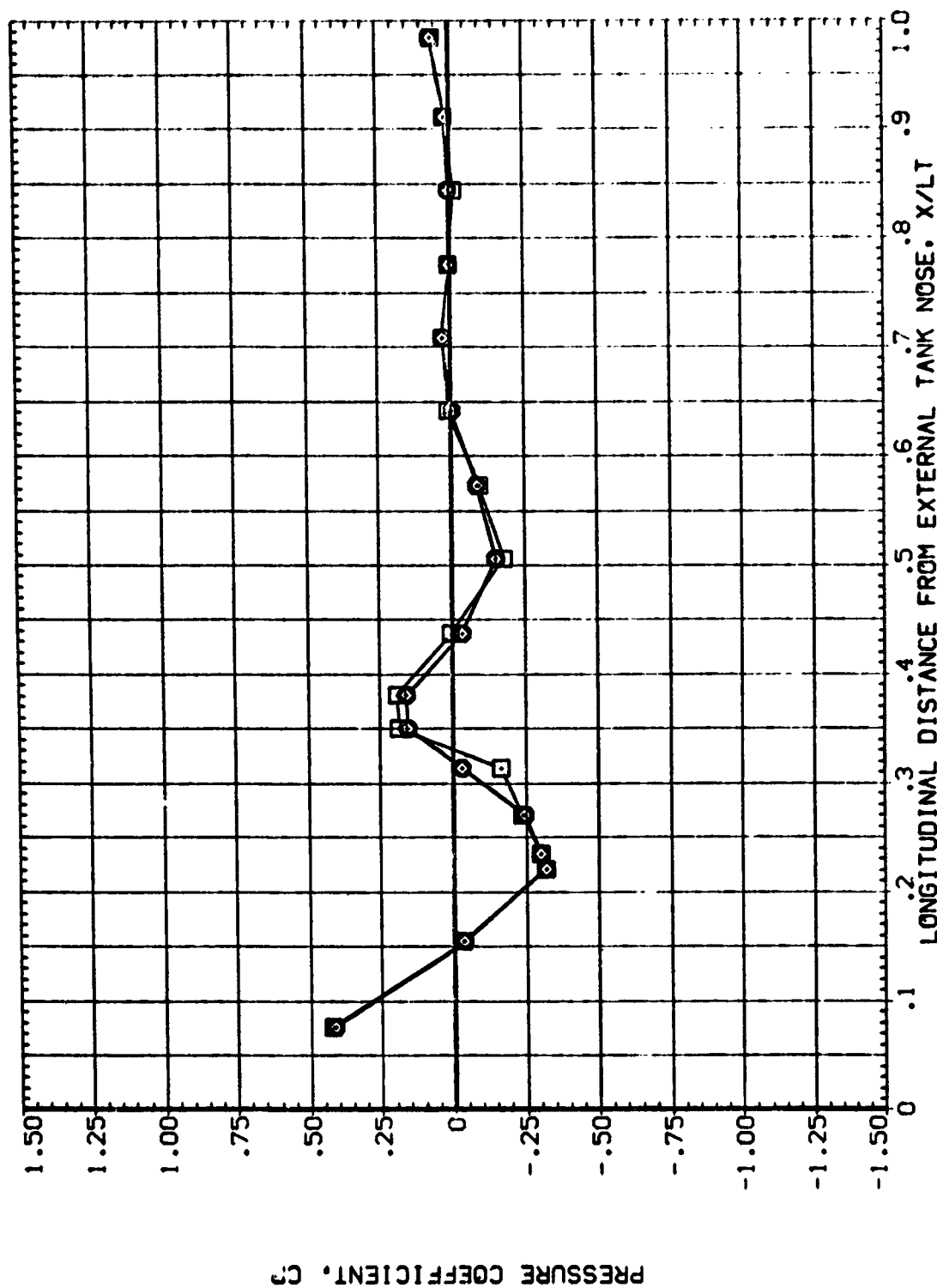
CONF 16	.000	90.000
RUGGER	.140	.000
ORRINC	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

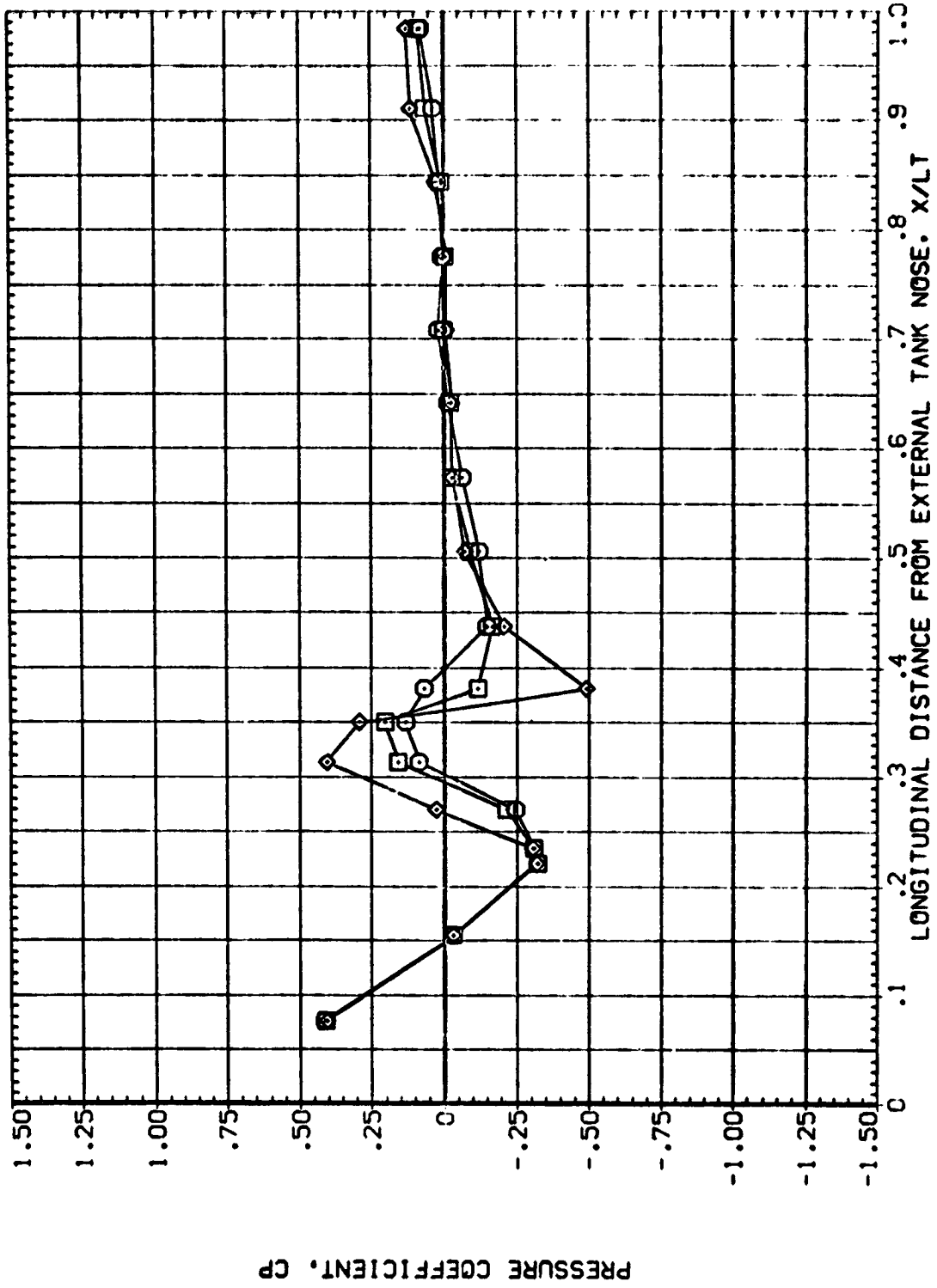
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XTRP	BETA	CONF16	CONF16	CONF16
□	162.000	.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	180.000							X-SRB	.000	.000	.500
◇	198.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

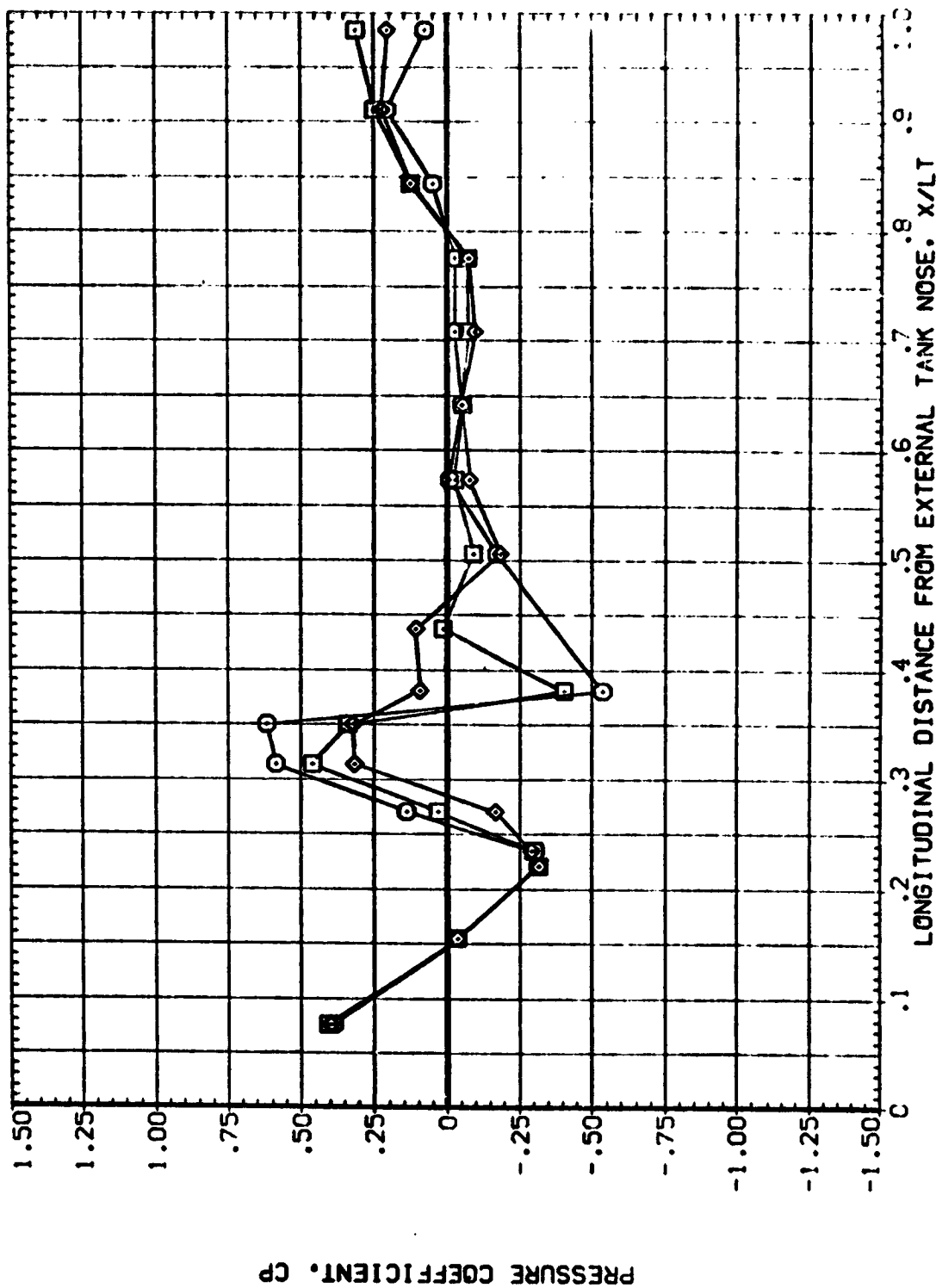
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONF IG	90.000
○	216.000	.000	1.250	5.198	5.313	DELTA Z		IN.	.000	R/COR	.000
□	234.000			5.313	2.549	X-SRB		IN.	.000	ORB INC	.500
◇	252.000			.000	.000			IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

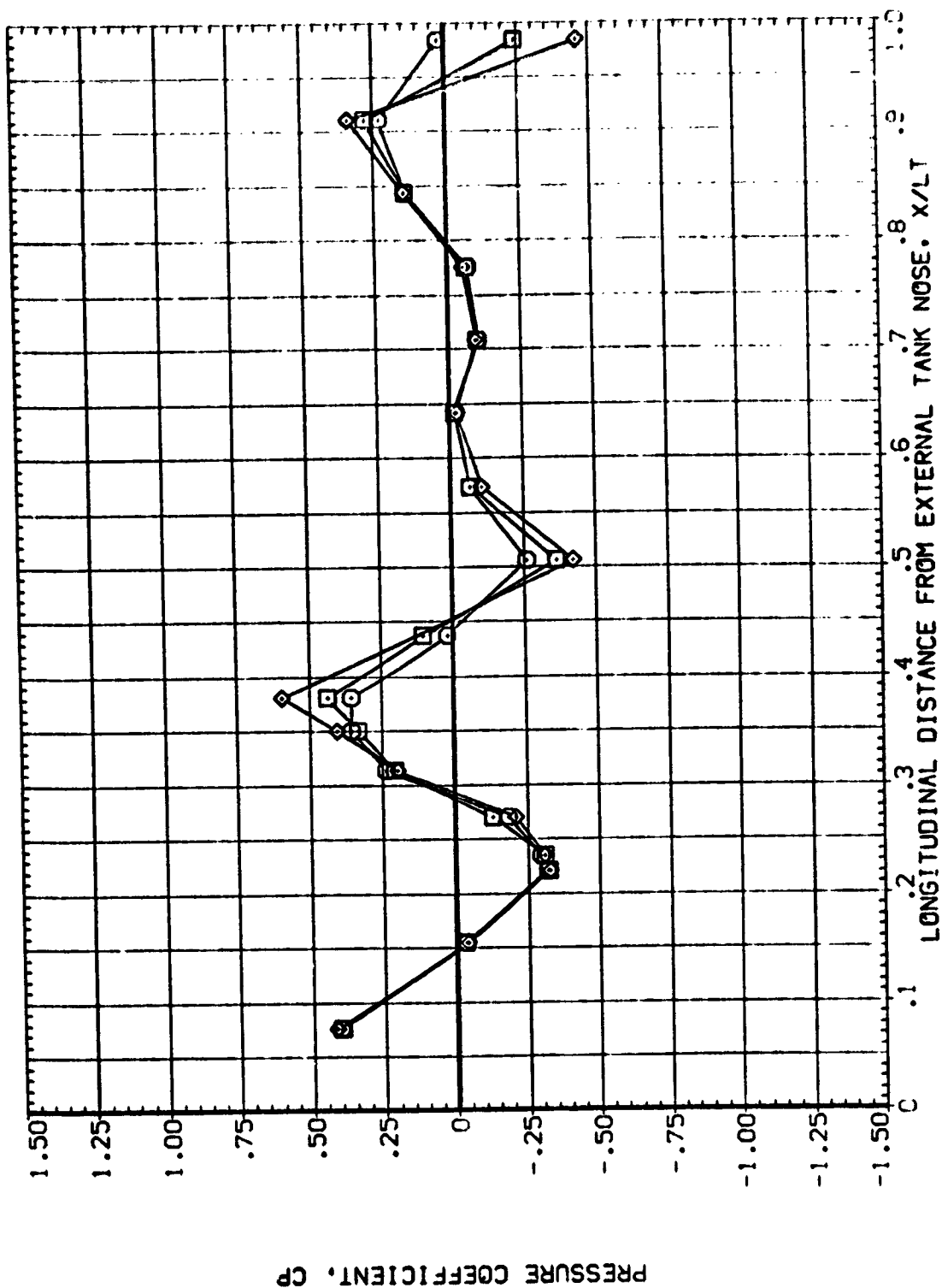
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YREF	ZREF	BETA	CONF	CONF
○	270.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.000
□	288.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.000
◇	306.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

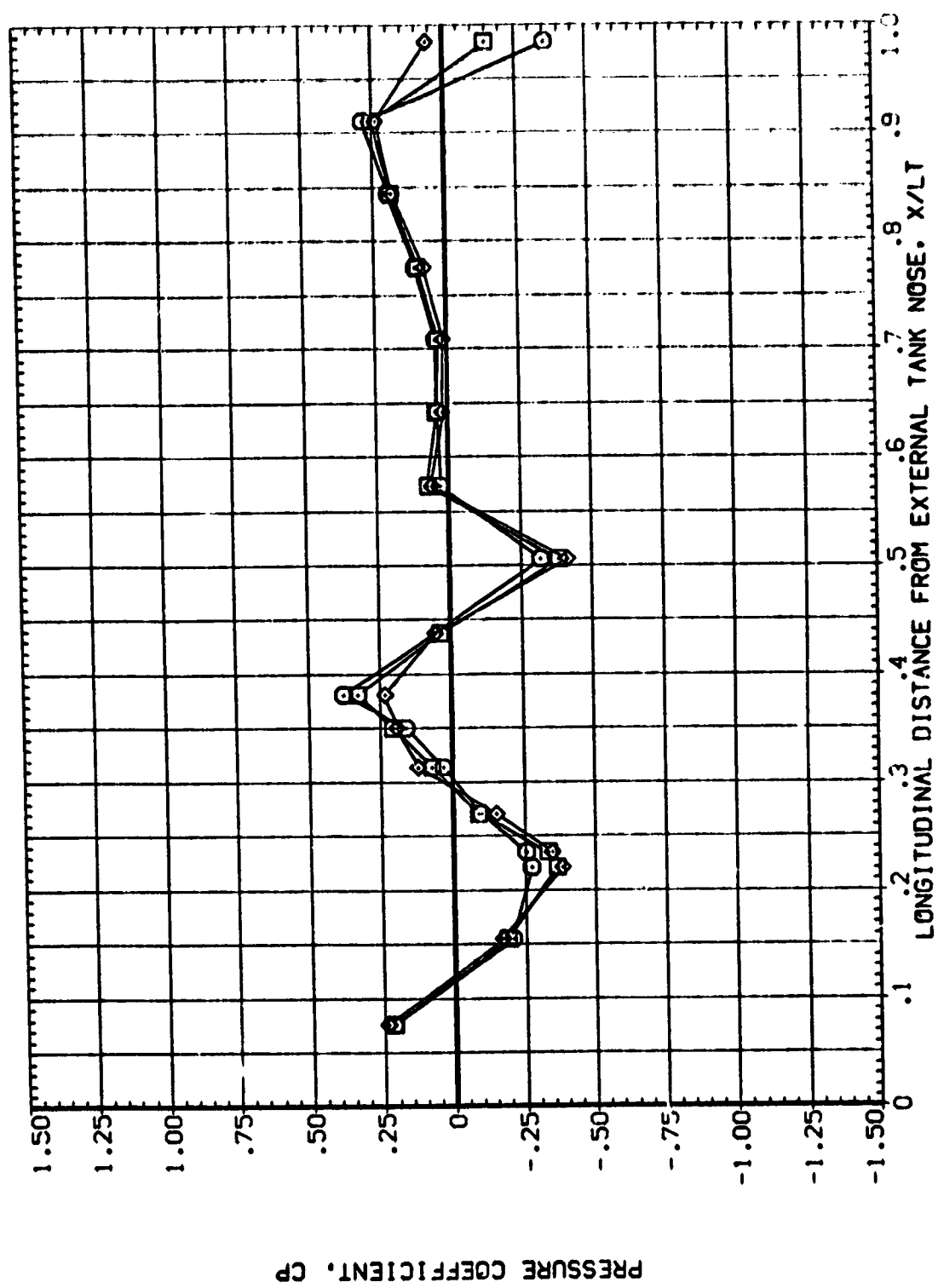
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				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CDNF15	90.000
○	324.000	.000	1.250	5.313	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	342.000			2.549				IN.	X-SRB	.140	.000
◇	360.000			.000				IN.		.000	.500
				ZMRP				IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

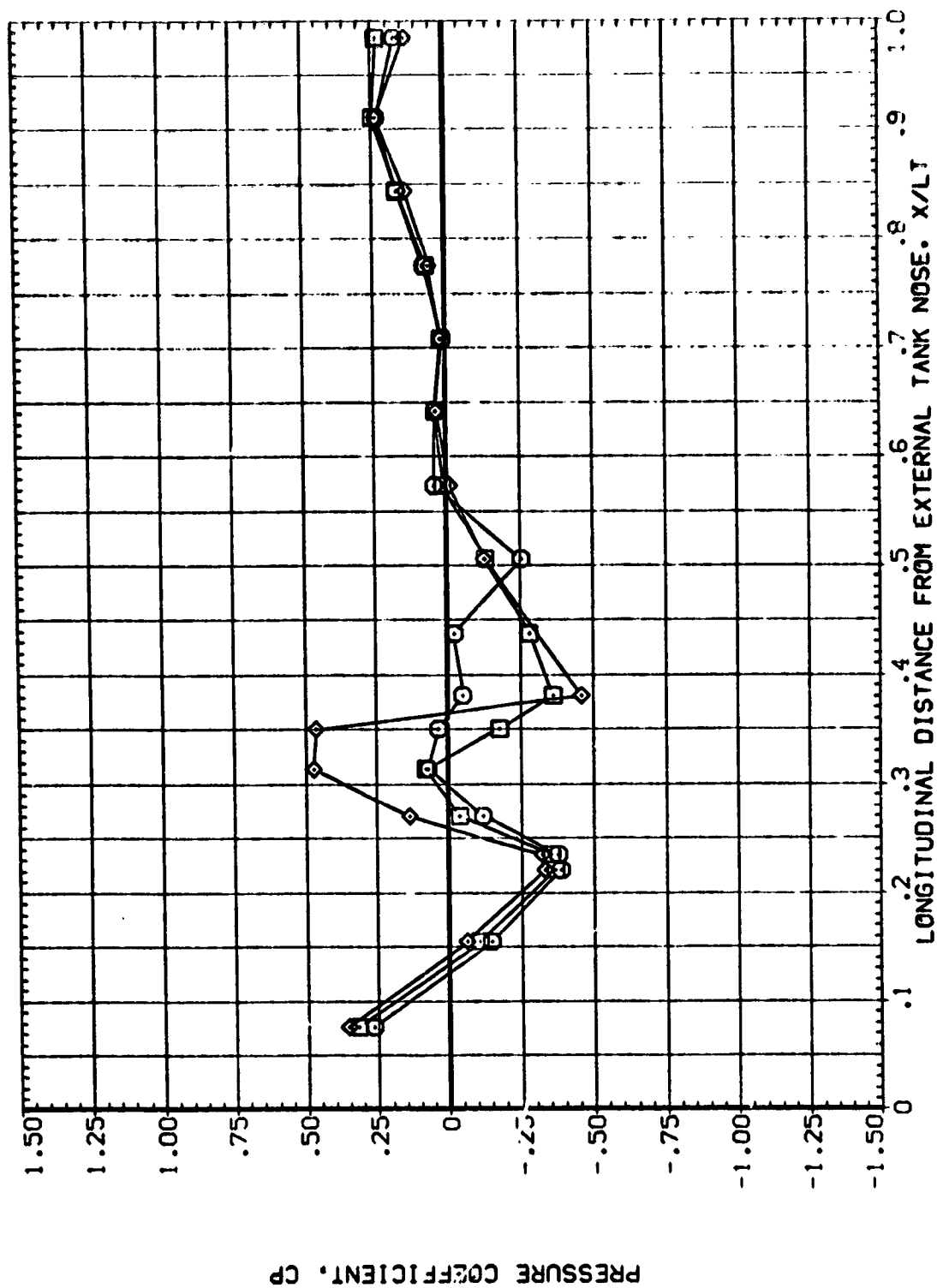
SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	0.000	18.000	8.000	1.250			SREF	LREF	BREF	XMRP	YMRP	ZMRP	BETA	DELTA Z
◇	.000	18.000	8.000	1.250			6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	.000	36.000											.140	RJDER
													.000	DRGINC
														.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

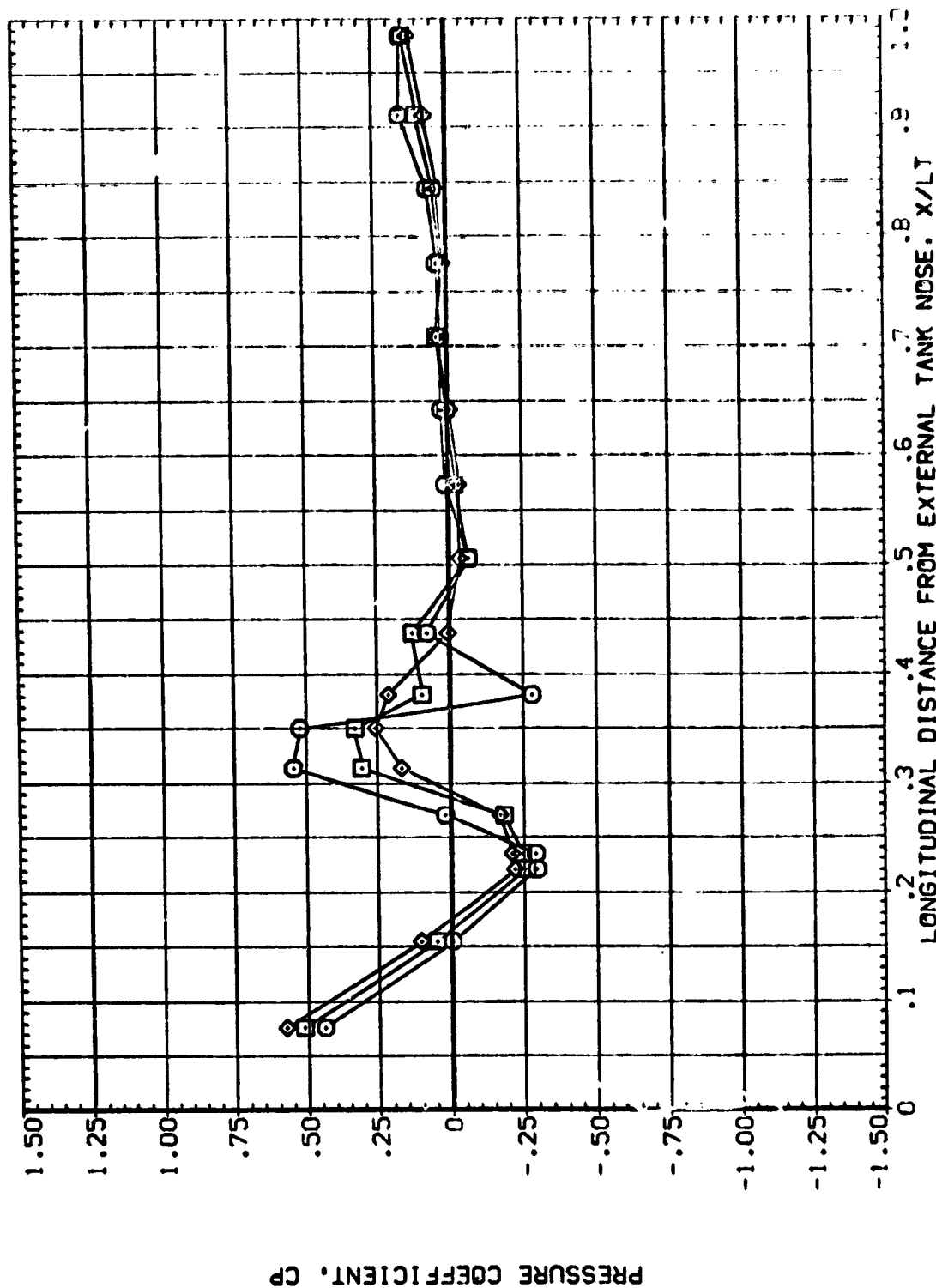
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	SO. IN.	BETA	CONF IS	90.000
	54.000	8.000	1.250	LREF	5.313	IN.	DELTAY	RUDDER	.000
	72.000			BREF	5.313	IN.	X-SRB	998 INC	.500
	90.000			XPRP	2.548	IN.			
				YPRP	.000	IN.			
				ZPRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SO. IN.	BETA	CONFIS	RUDDER
○	108.000	8.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.140
□	126.000							IN.	X-SRB	.000	.000
◇	144.000							IN.			.500

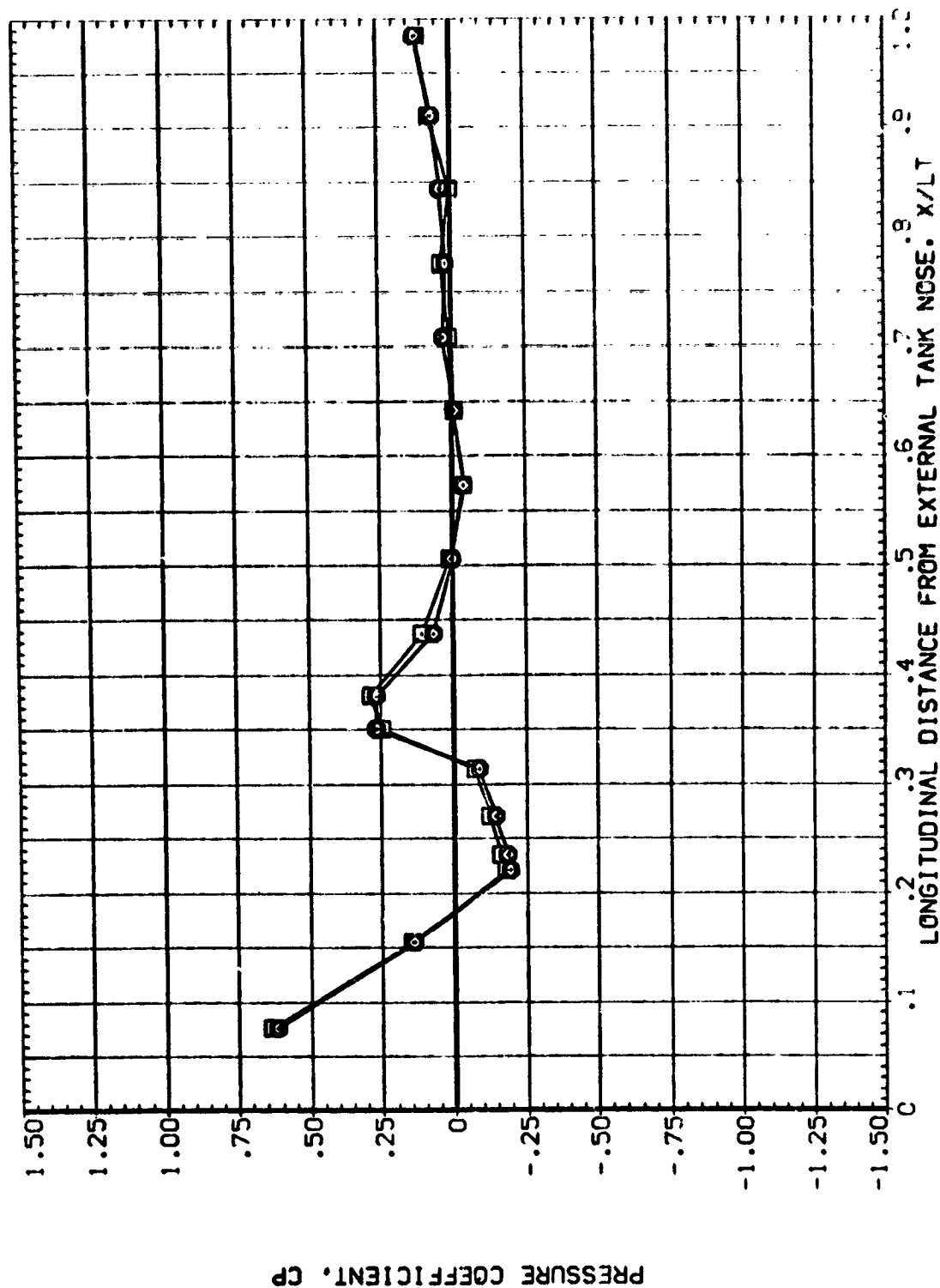


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

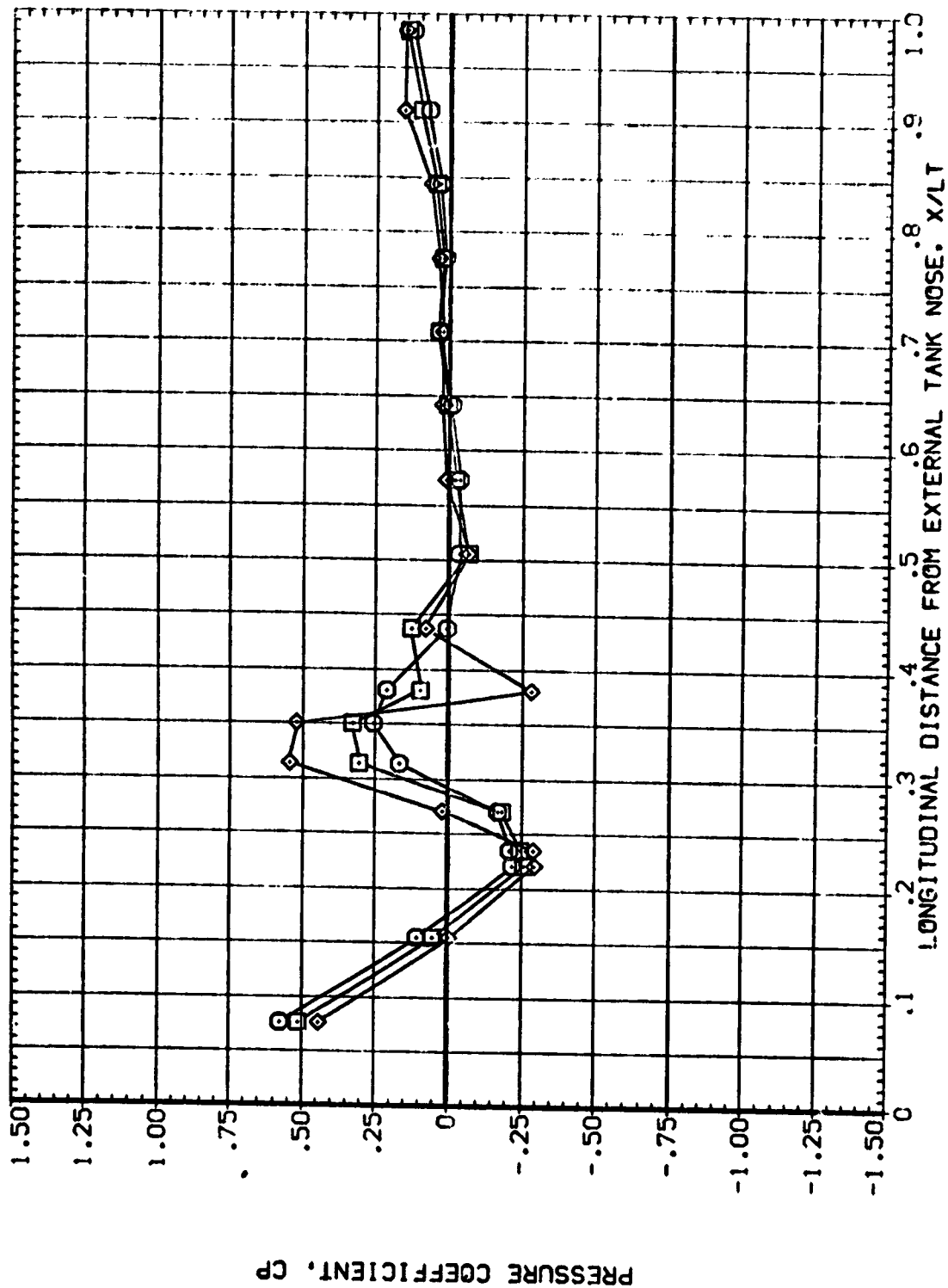
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	6.198	BETA	COEFF
○	162.000	8.000	1.250	LREF	5.313	DELTA Z	RUDER
□	180.000			BREF	5.313	X-SRB	5981N
◇	198.000			XREF	2.549		
				YREF	.000		
				ZREF	.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

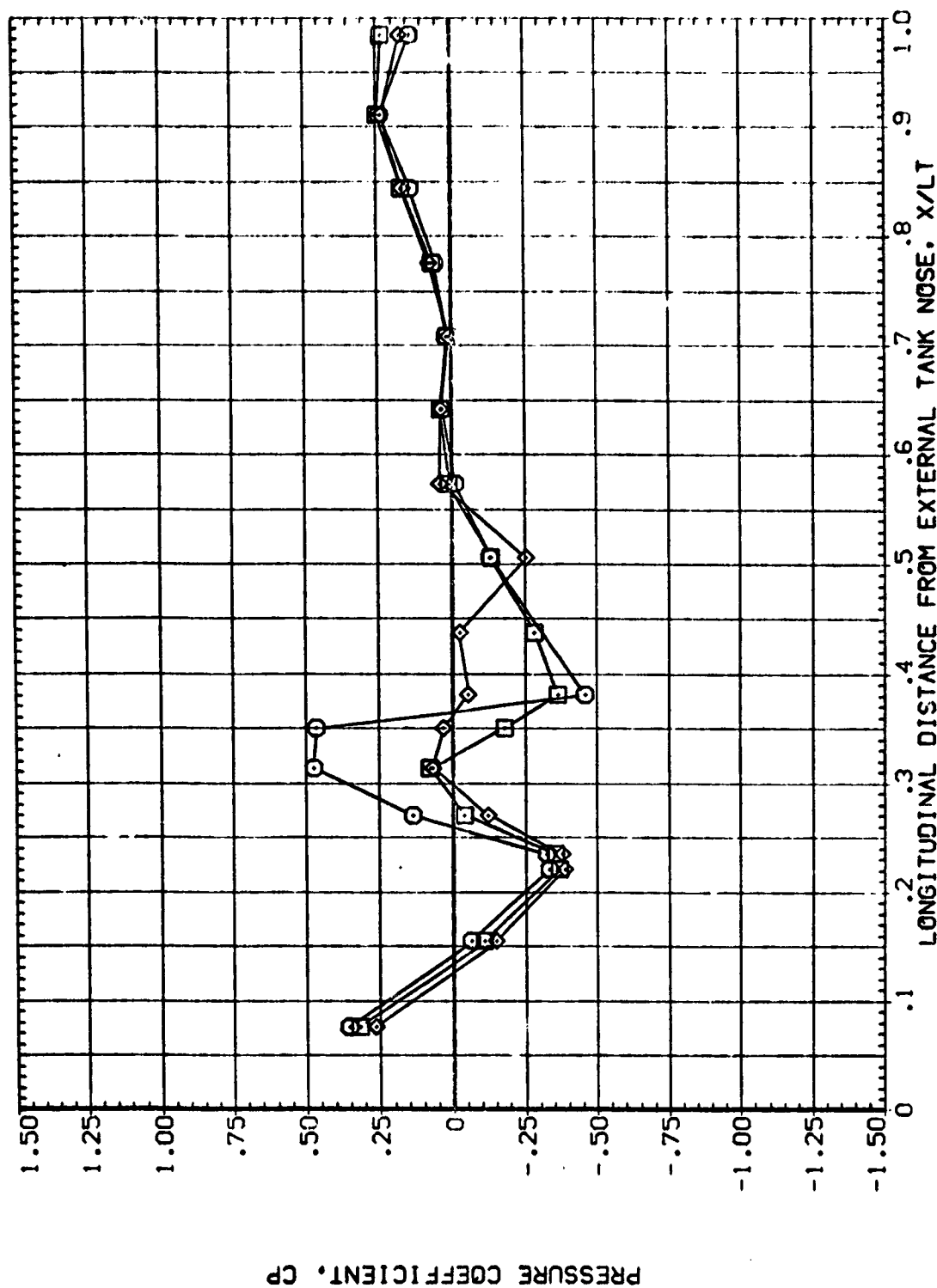
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SO. IN.	IN.	BETA
○	216.000	8.000	1.250	6.199	5.313	5.313	2.549	.000	90.000	.000	CONFIC
□	234.000								.140	.000	RUDER
◇	252.000								.000	.000	ORBITAL



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

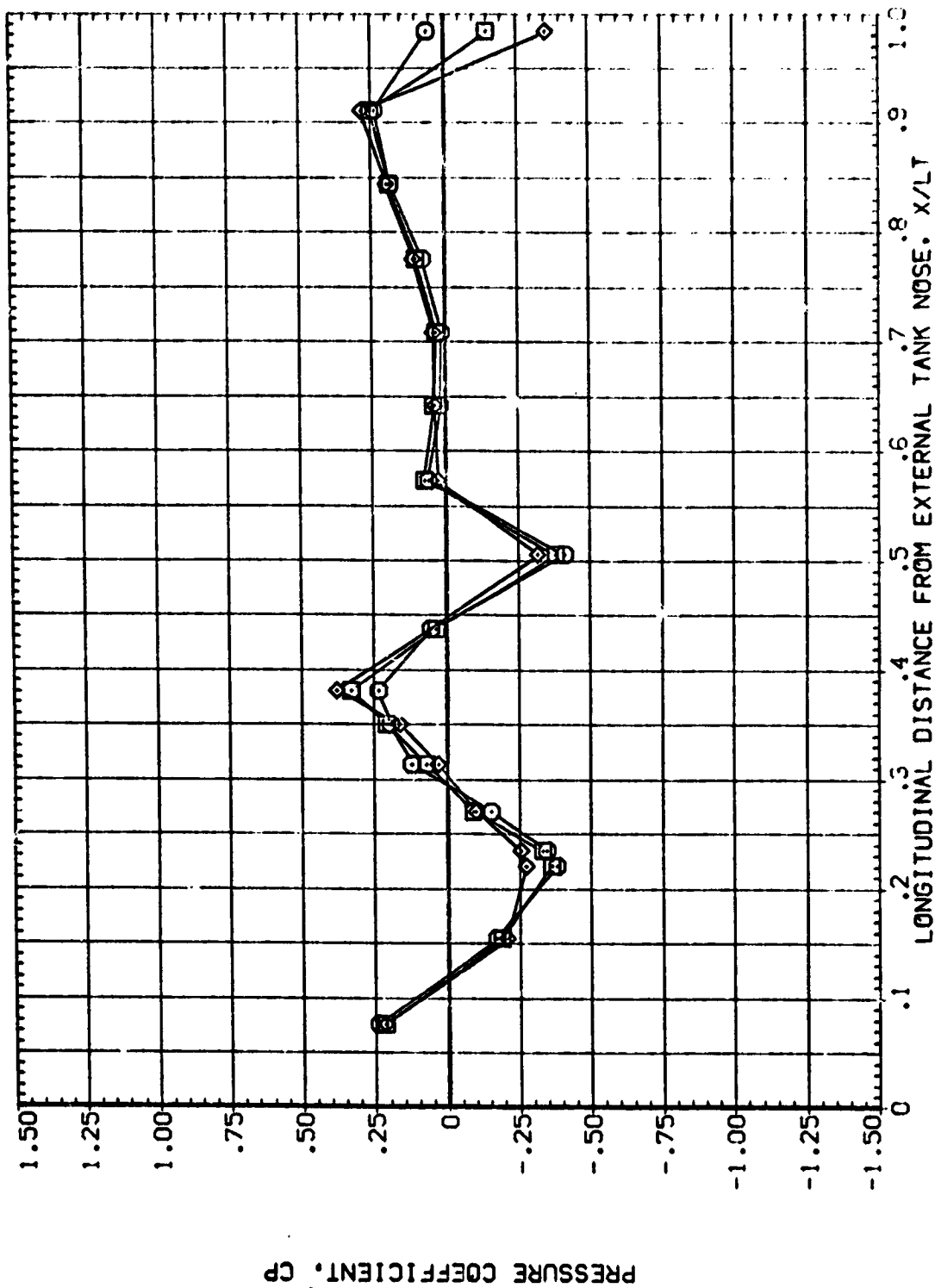
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	DELTAZ	CONFIG	VALUES
○	270.000	8.000	1.250	6.198	5.313	5.313	2.549	.000	.140	RUDDER	.000
□	288.000							X-SRB	.000	CRBINC	.500
◇	306.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA			PARAMETRIC VALUES			
				SREF	LREF	BREF	BETA	CONF 16	CONF 17	CONF 18
○	324.000	8.000	1.250	6.198	5.313	5.313	DELTA Z	.000	.000	.000
□	342.000			2.548			X-SRB	.140	.000	.000
◇	360.000			.000				.000	.000	.500

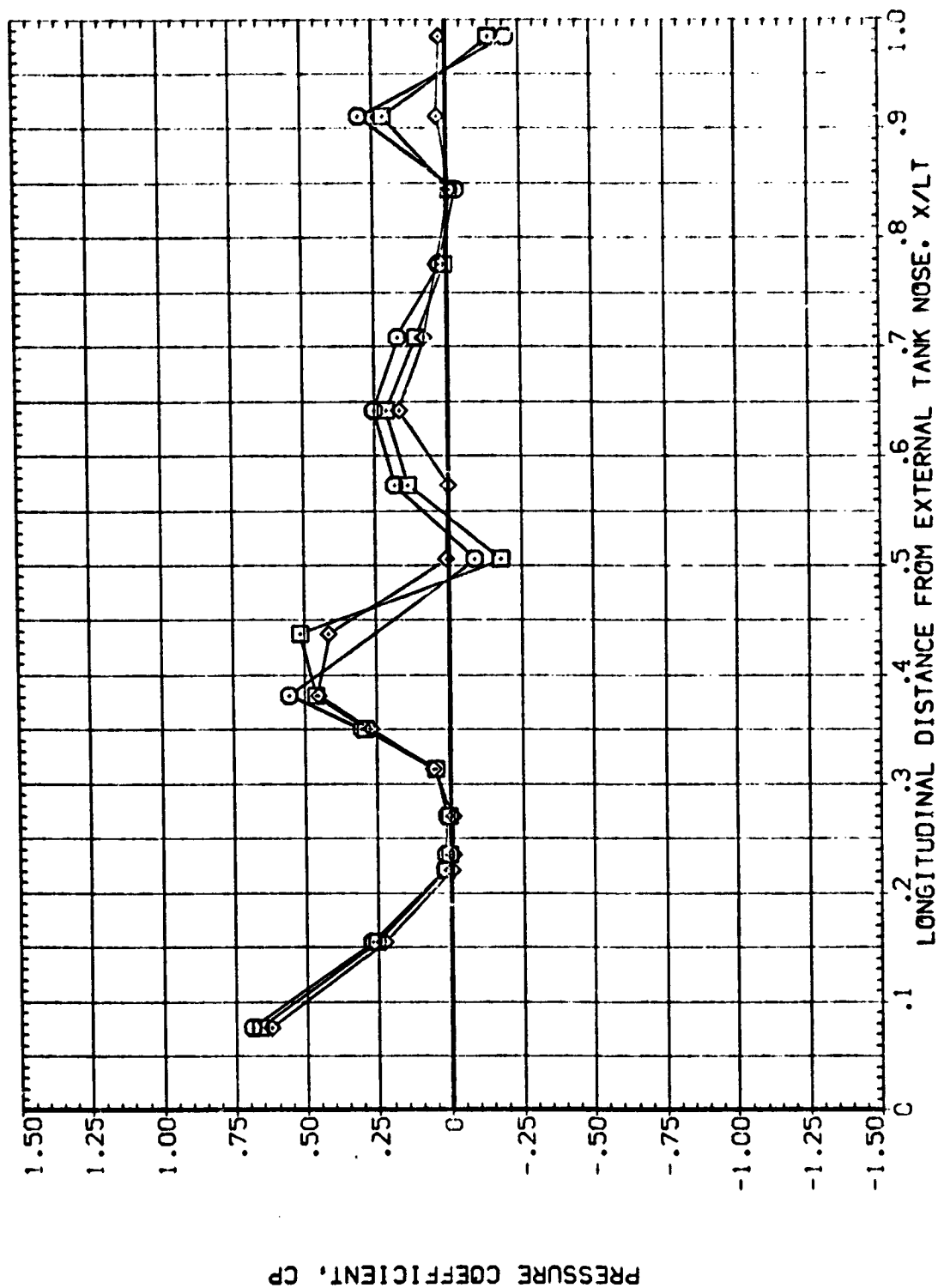


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

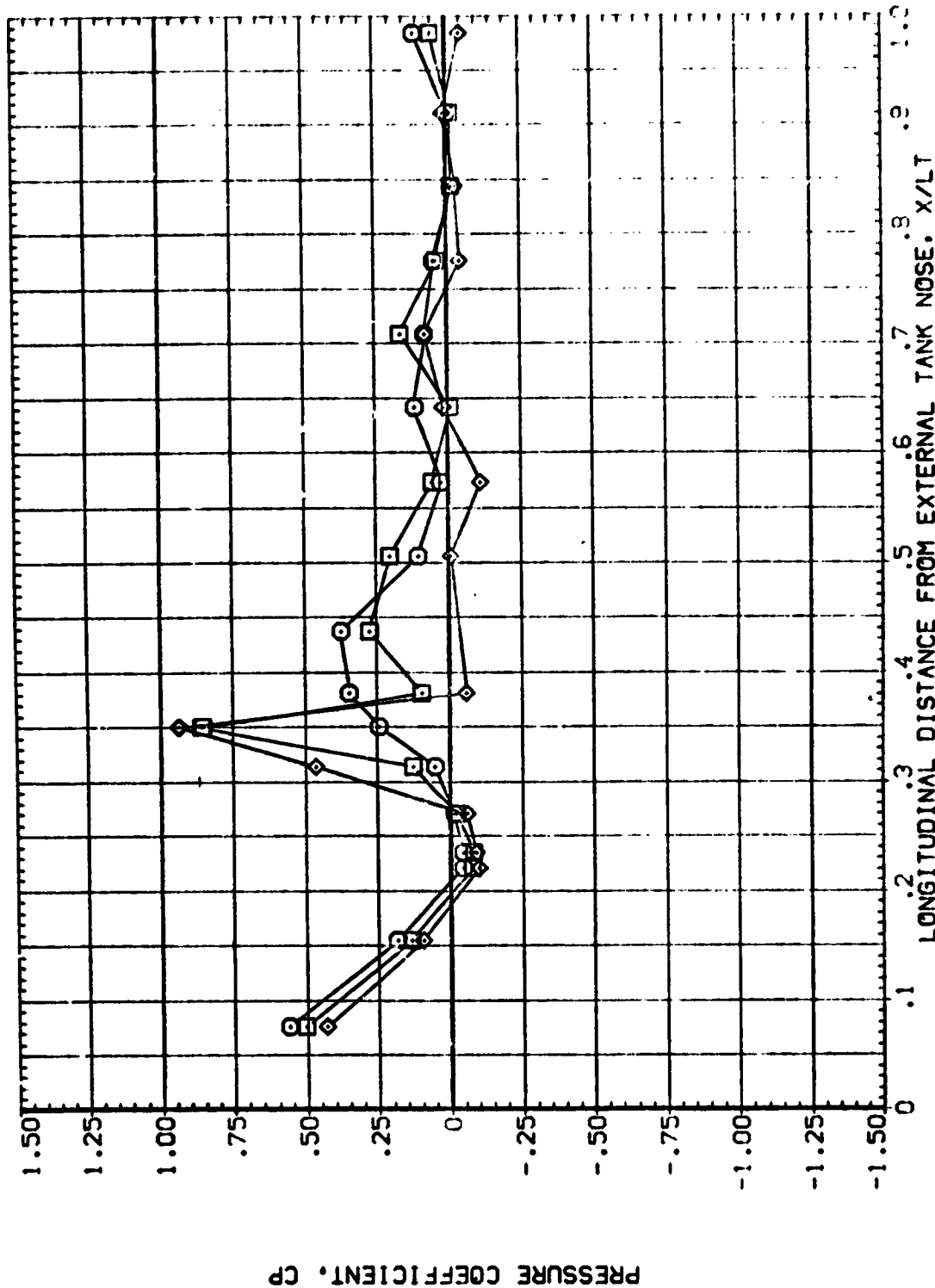
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONF IG	
○	.000	-8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	90.000
□	18.000							IN.	X-SRB	.140	.000
◇	36.000							IN.		.000	.500
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

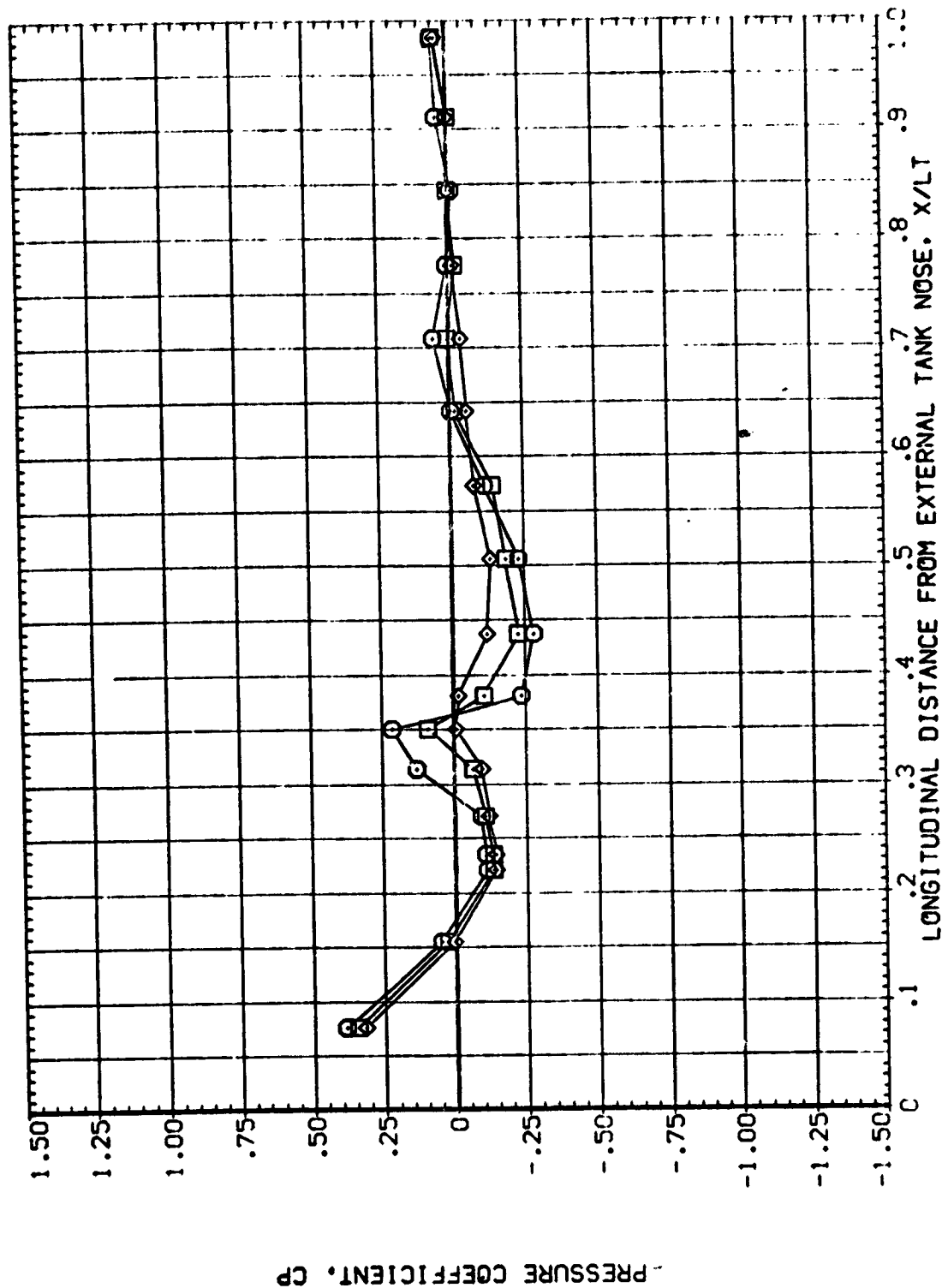
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
□	54.000	-8.000	1.960	SREF 6.198	CONF IG	90.000
◇	72.000			LREF 5.313	DELTA Z	.000
	90.000			BREF 5.313	X-SRB	.000
				XMRP 2.549	ORBITAL	.500
				YMRP .000		
				ZMRP .000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

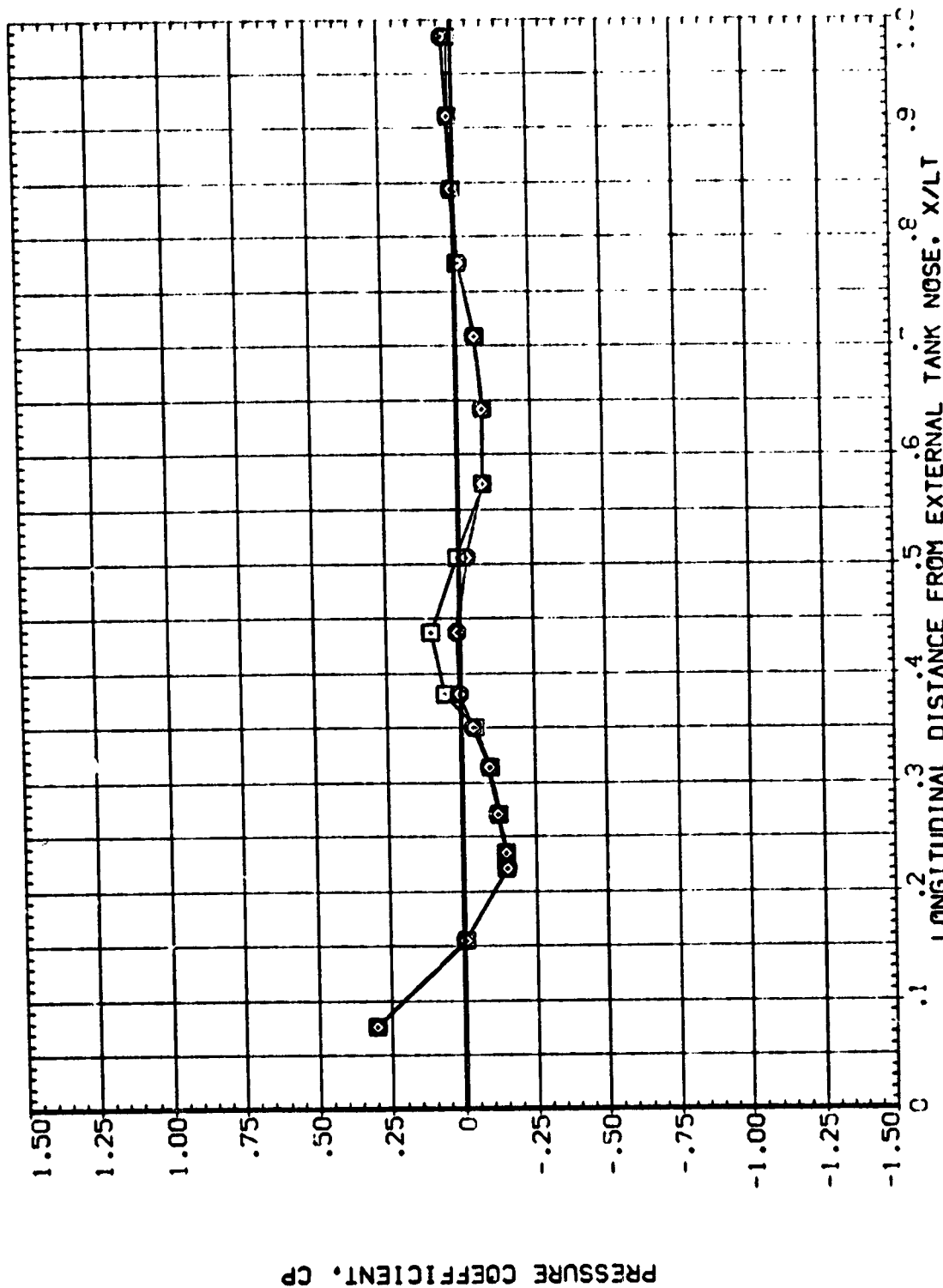
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	SO. IN.	BETA	CONF IG	90.000
○	108.000	-8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	126.000							IN.	X-SRB	.000	.000
◇	144.000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SQ. IN.	BETA	CONF IG	
□	162.000	-8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	CONF IG
◇	180.000							IN.	X-SNB	.140	RUDER
◇	198.000							IN.		.000	DRG: NC
								IN.			.500
								IN.			



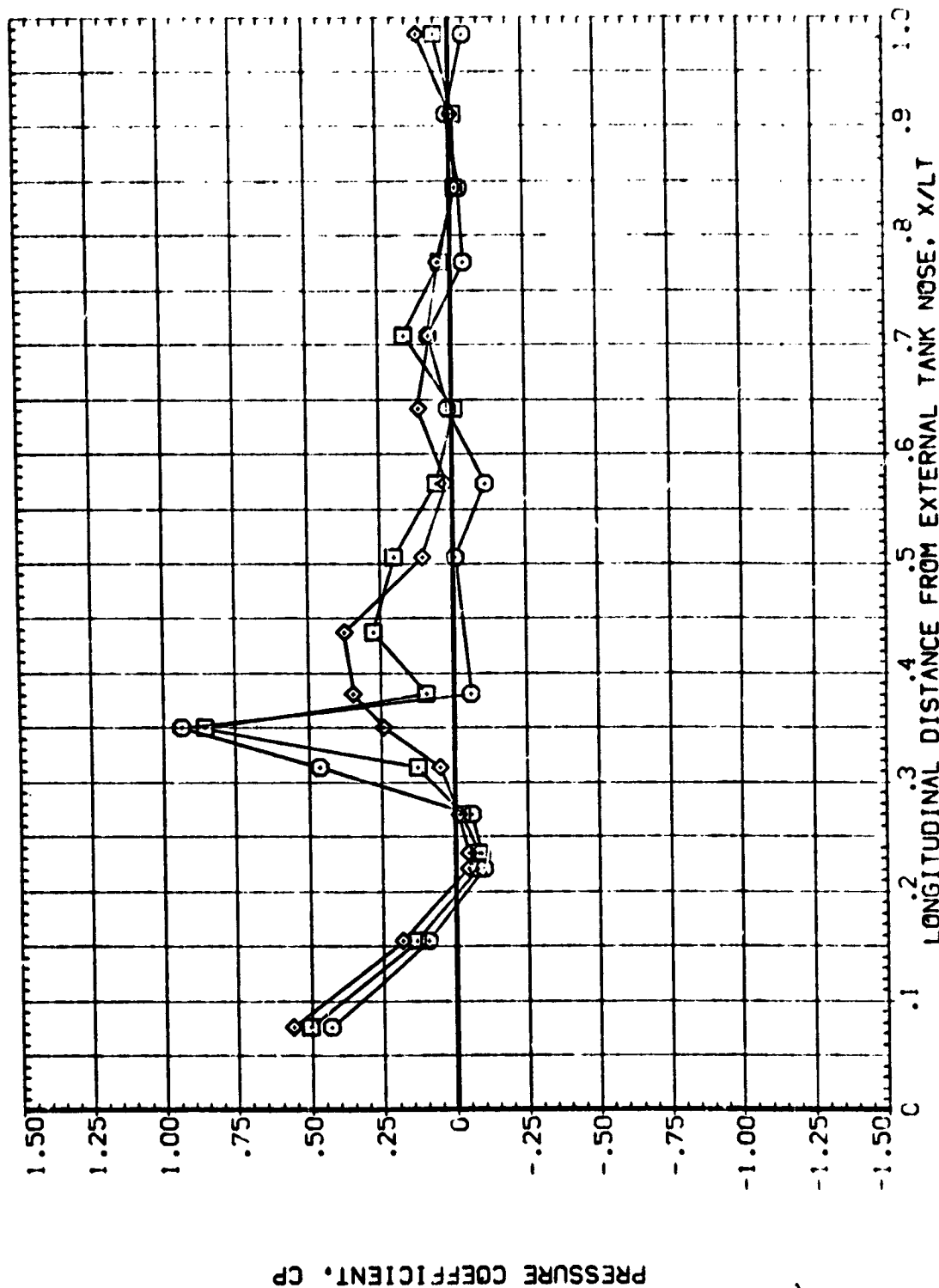
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



Symbol	Phi	Alpha	Mach	Reference Data			Parametric Values		
○	216.000	-8.000	1.960	SREF	6.198	SO. IN.	BETA	.000	CONF'G
□	234.000			LREF	5.313	IN.	DELTA Z	.140	RUDER
◇	252.000			BREF	5.313	IN.	X-SFB	.000	CRS:INC
				XMRP	2.549	IN.			
				YMRP	.000	IN.			
				ZMRP	.000	IN.			

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

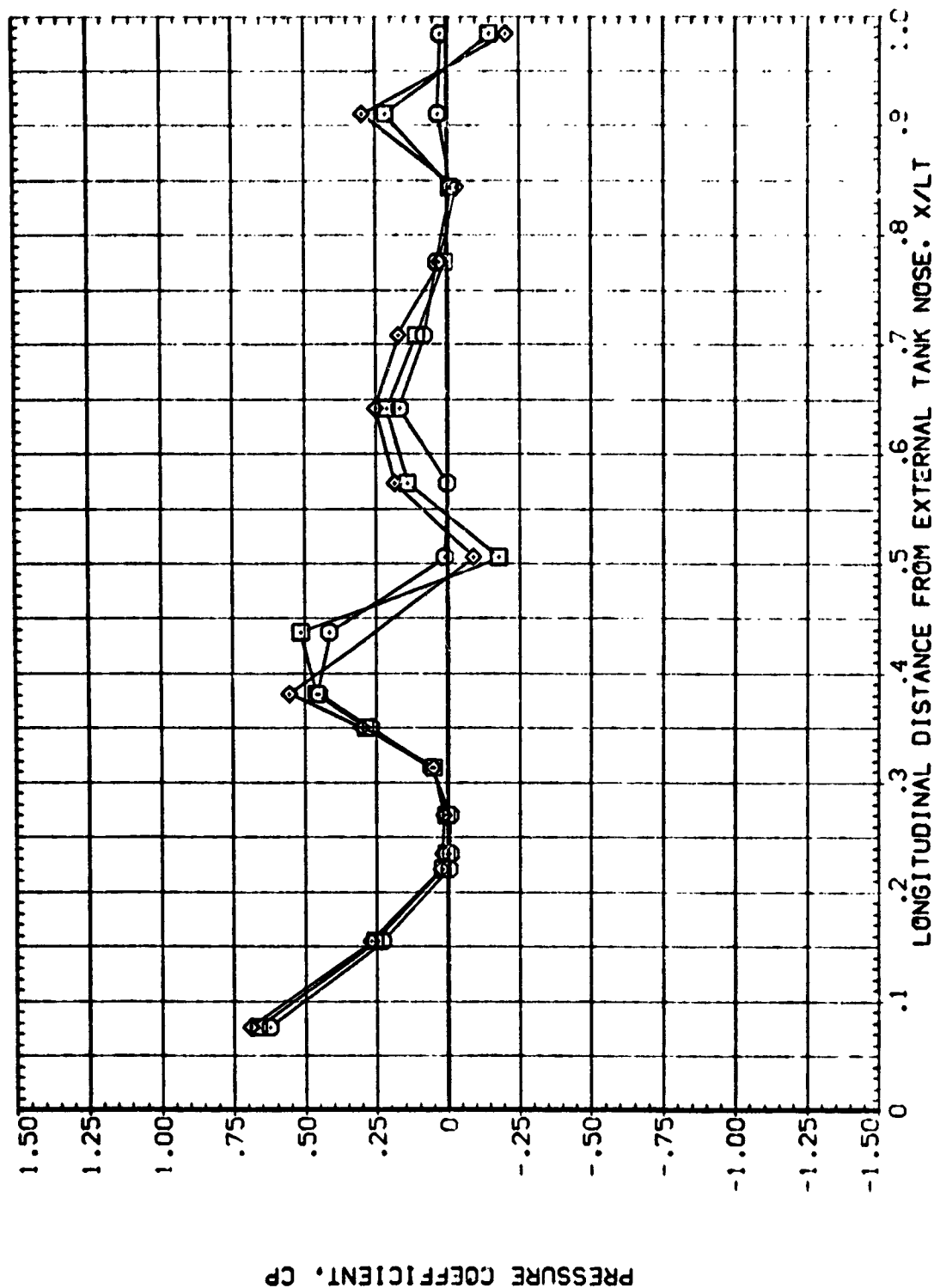
SYMBOL	PMI	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	270.000	-8.000	1.960	SREF 6.198	.000	CONF IG 90.000
□	288.000			LREF 5.313	.140	RUDER .000
◇	306.000			BREF 5.313	.000	CSBINC .500
				XMRP 2.549		
				YMRP .000		
				ZMRP .000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 367(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SQ. IN.	BETA	CONFIS	90.000
□	324.000	-8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	342.000							IN.	X-SRB	.140	.000
◇	360.000							IN.		.000	.500
								IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 .000  
 18.000  
 36.000

ALPHA  
 .000  
 1.960

MACH  
 1.960

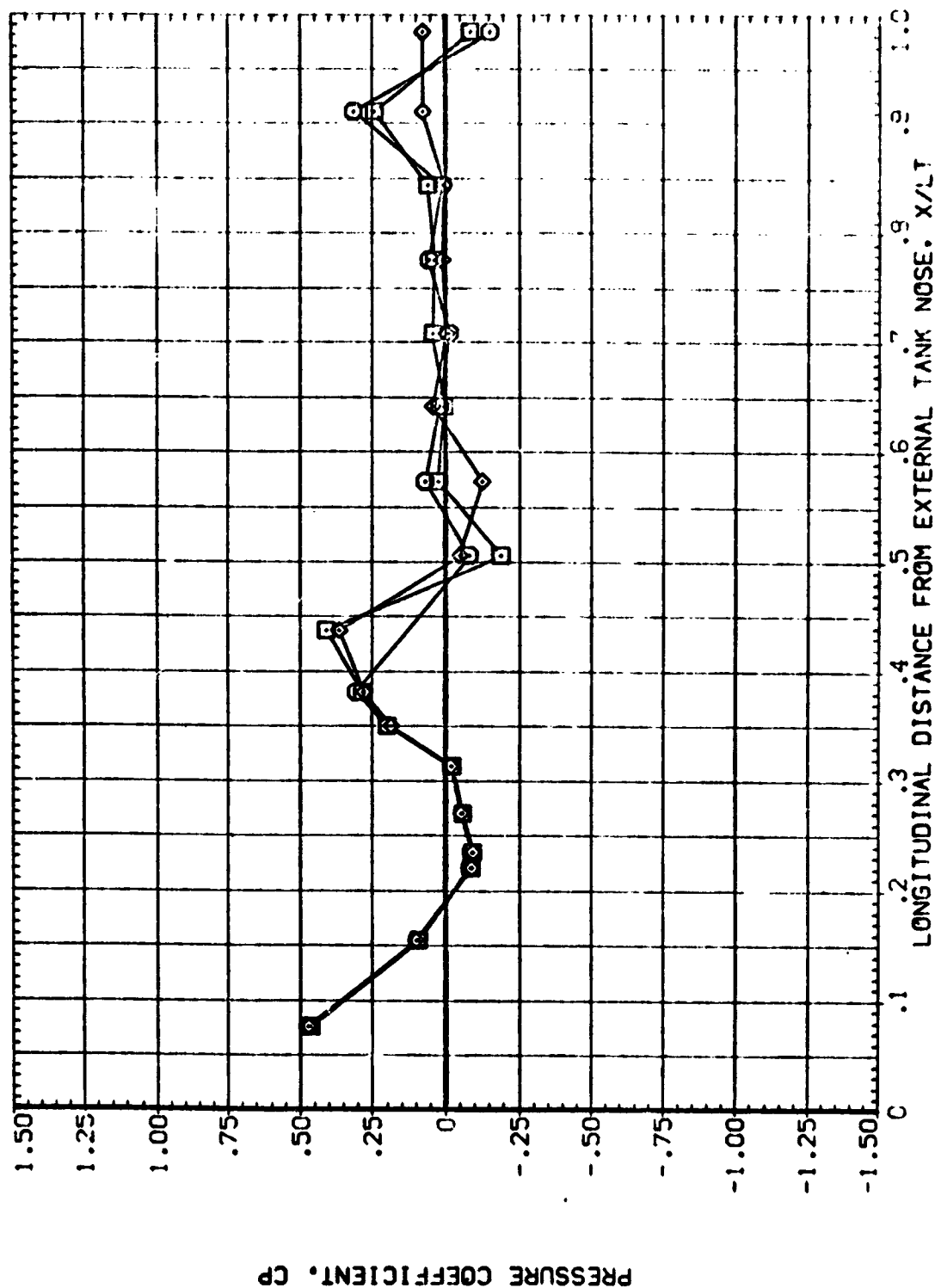
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 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000 COEFF IS  
 .140 RUDDER  
 .000 CRB INC

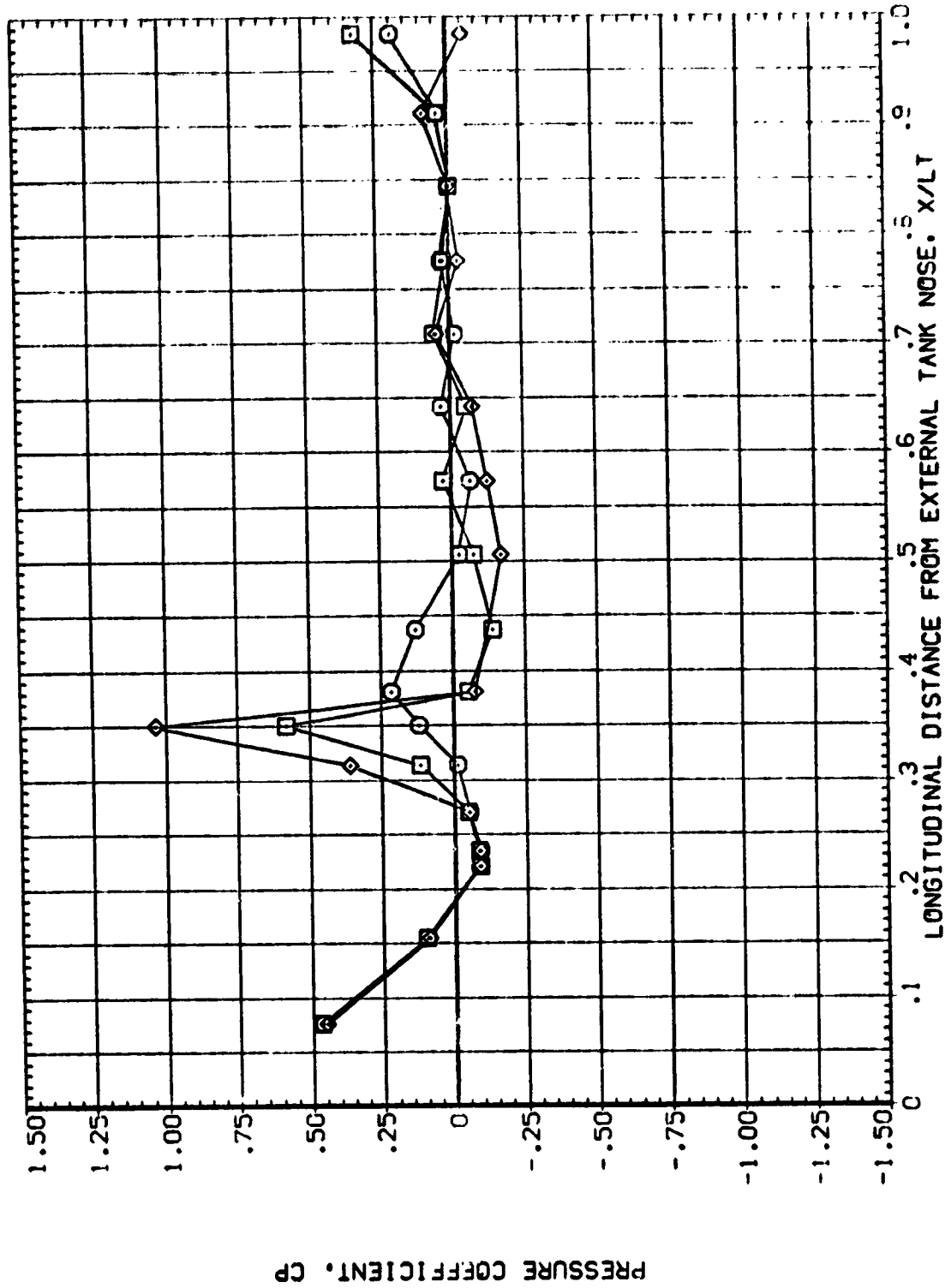
90.000  
 .000  
 .500



LONGITUDINAL DISTANCE FROM EXTERNAL TANK NOSE, X/LT

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	BETA	CONFIS	RLODER	ORBITINC
□	54.000	.000	1.960	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	72.000							X-SRB	.000	.000	.500
◇	90.000										



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL

PHI  
108.000  
126.000  
144.000

ALPHA  
.000  
1.960

MACH  
1.960

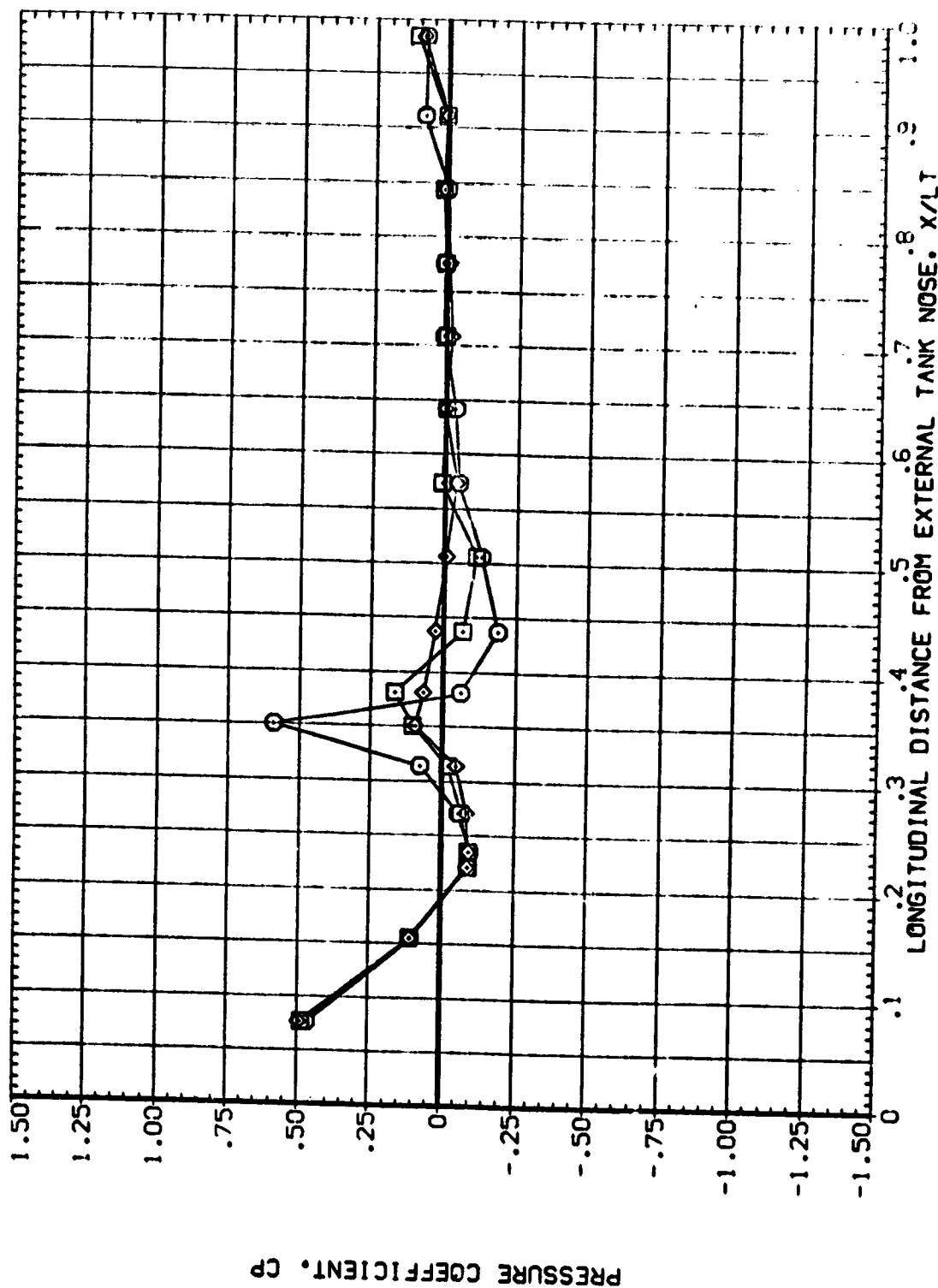
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SREF 5.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000  
.140  
.000  
CONF 15  
RUDER  
DRG INC

90.000  
.000  
.500

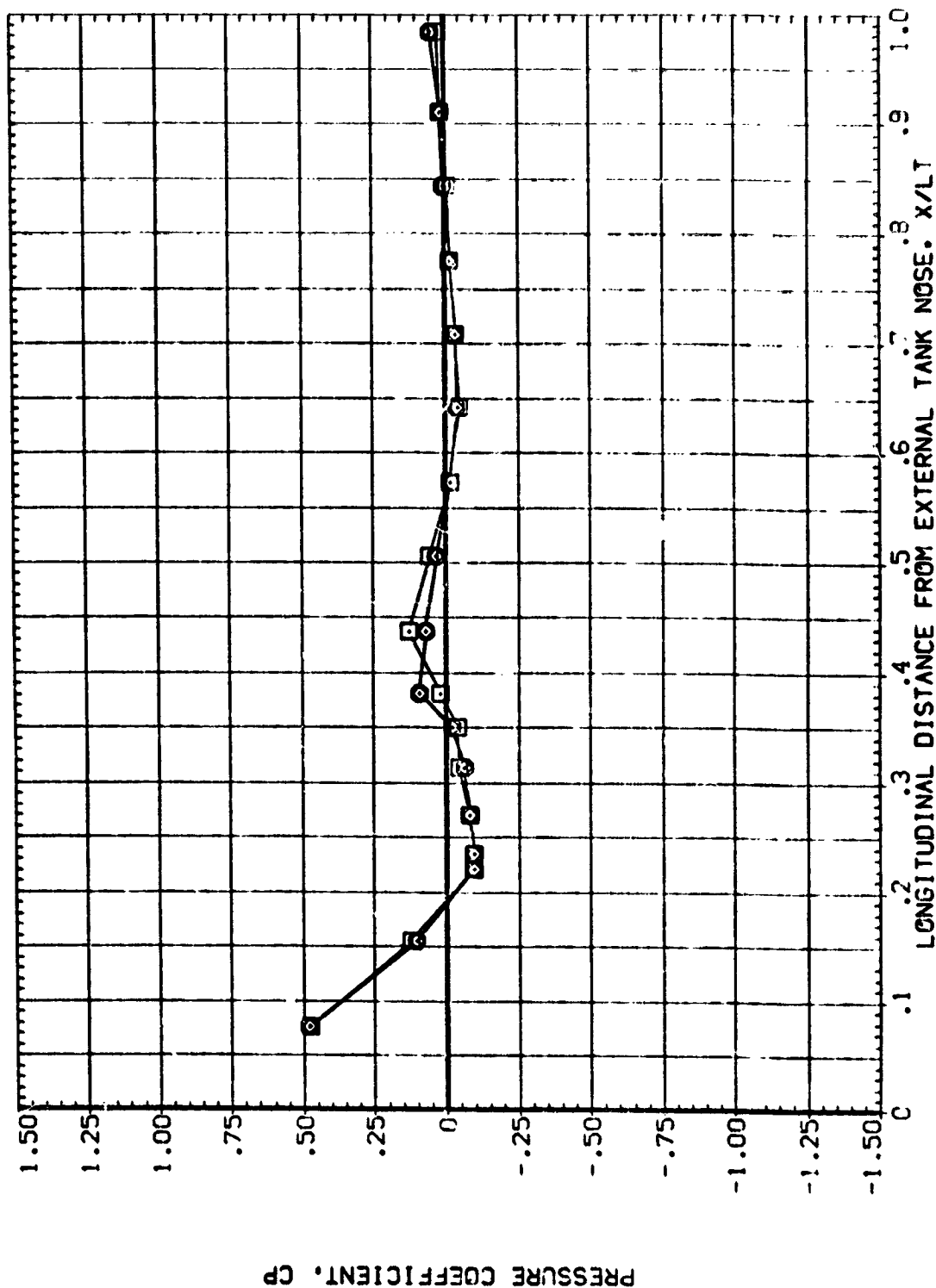


LONGITUDINAL DISTANCE FROM EXTERNAL TANK NOSE, X/LT

PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82101)

PHI	ALPHA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
			SREF	LREF	BREF	BETA	CONF16	CONF16
162.000	.000	1.960	6.198	5.313	5.313	DELTAZ	.000	.000
180.000			2.549	2.549	2.549	X-SRB	.140	.000
198.000			.000	.000	.000		.000	.500
			ZMRP	ZMRP	ZMRP			

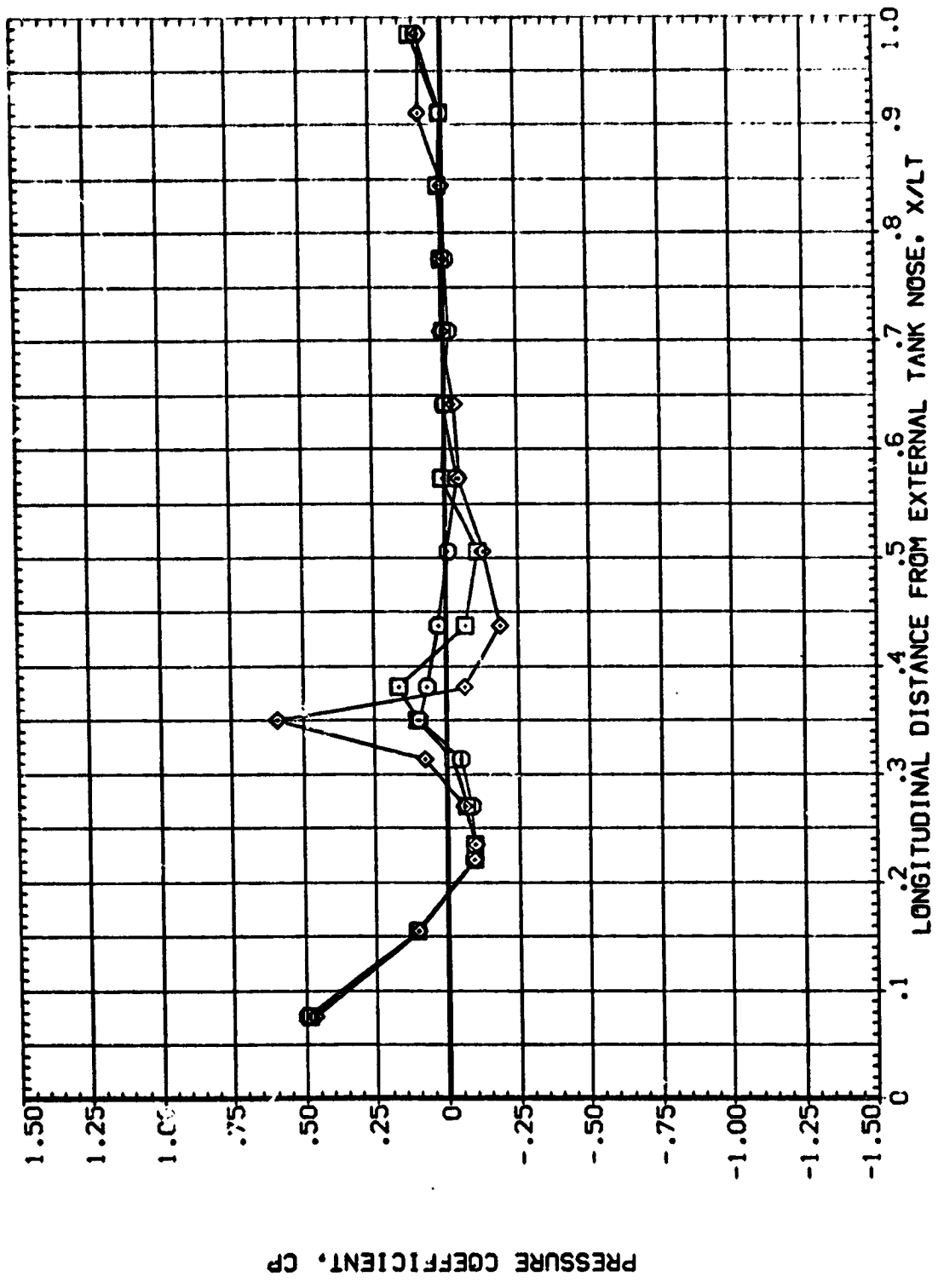


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

7.2

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A827C1)

PHI	216.000	ALPHA	.000	MA	1.960	REFERENCE DATA	SG IN.	BETA	CONFIS	PARAMETRIC VALUES
SYMBOL	234.000					SREF	6.198	DELTA Z	.000	.000
	252.000					EREF	5.313	Y-SRB	.140	R-ORDER
						YREF	2.517		.000	URBINE
						ZREF	.000			
							.000			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
○  
□  
◇

PHI  
270.000  
288.000  
306.000

ALPHA  
.000  
1.960

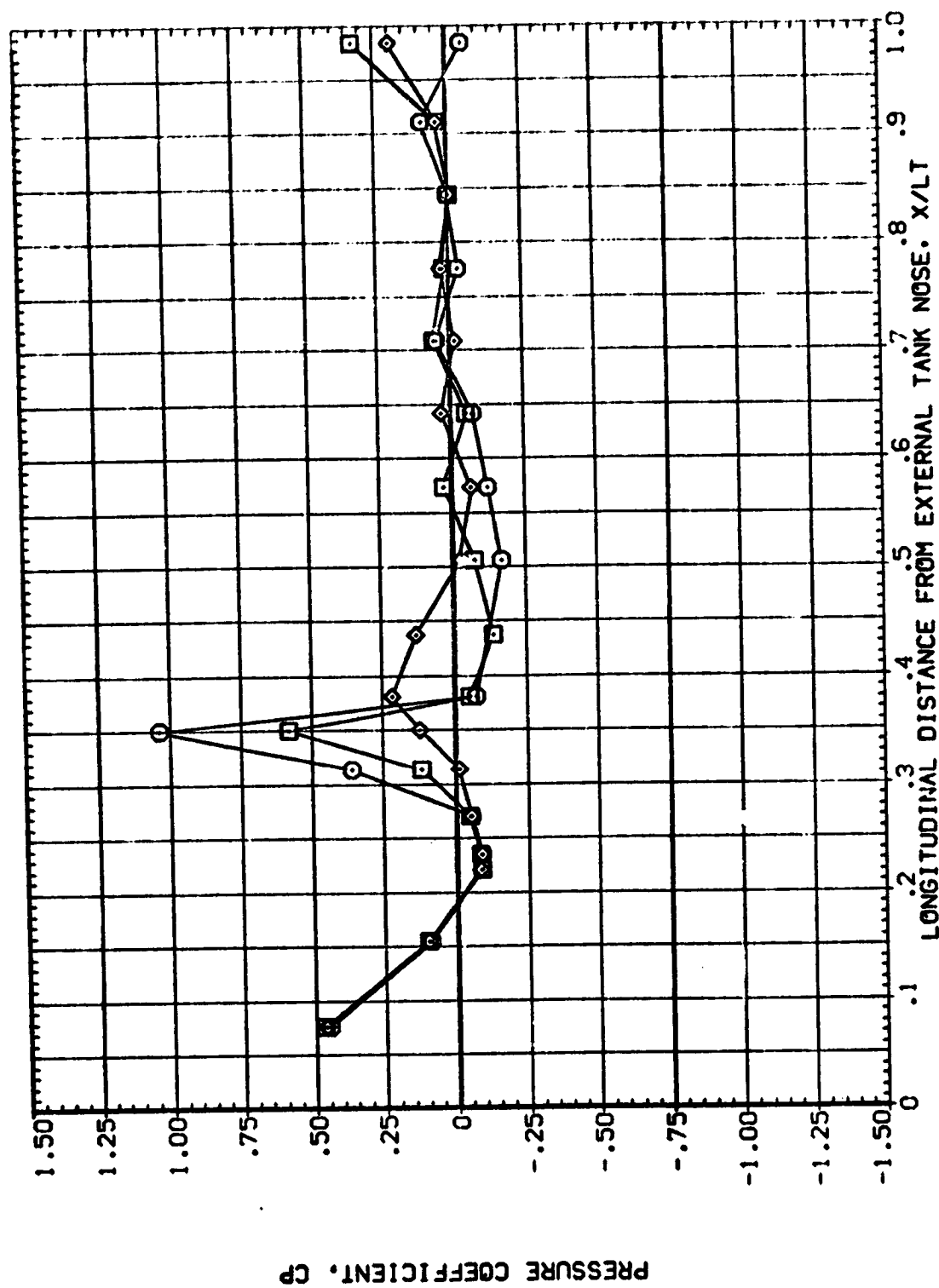
MACH  
1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SRB

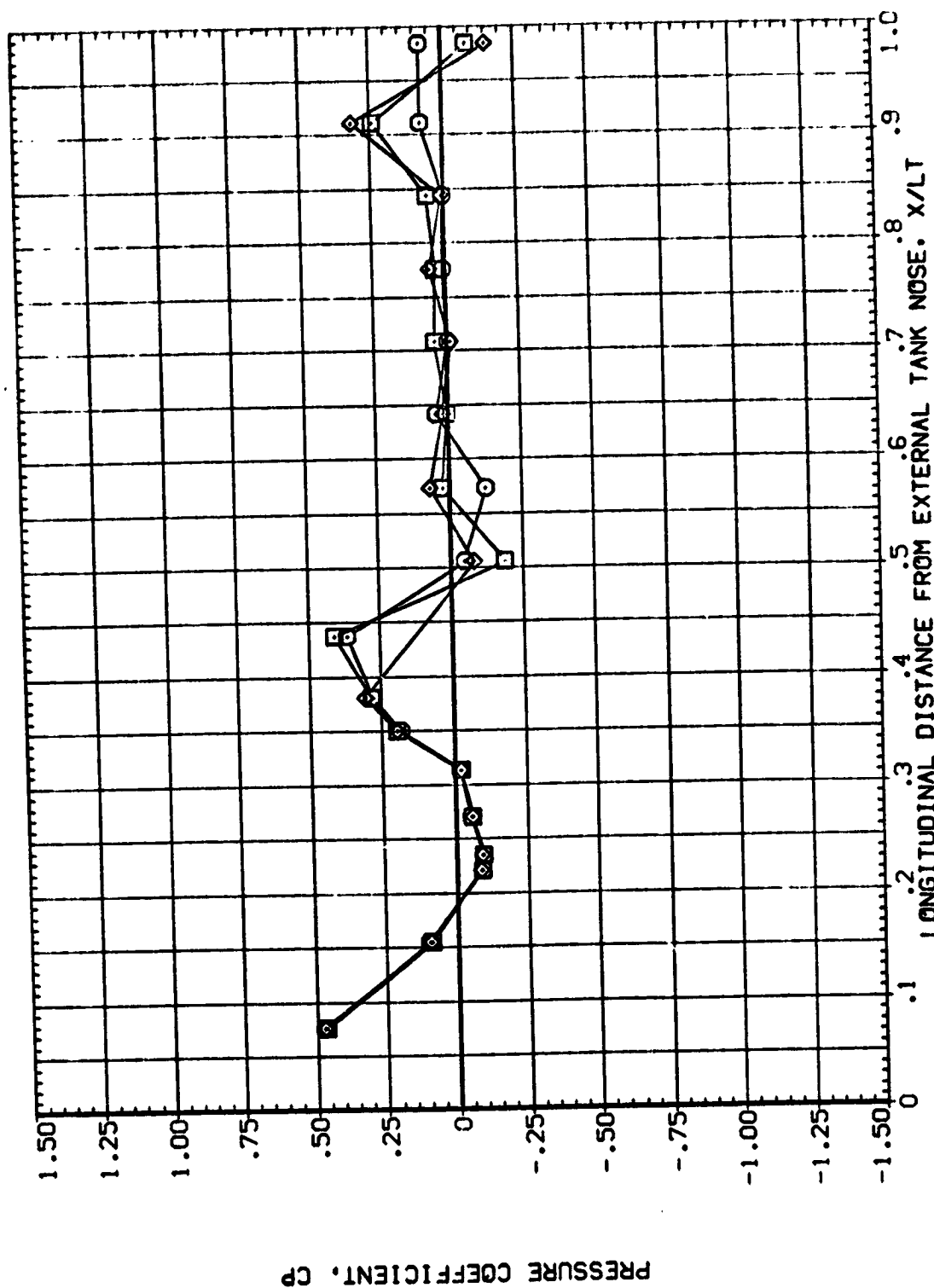
PARAMETRIC VALUES  
.000 CONF IG  
.140 RUCCOR  
.000 098 INC  
90.000  
.000  
.50



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

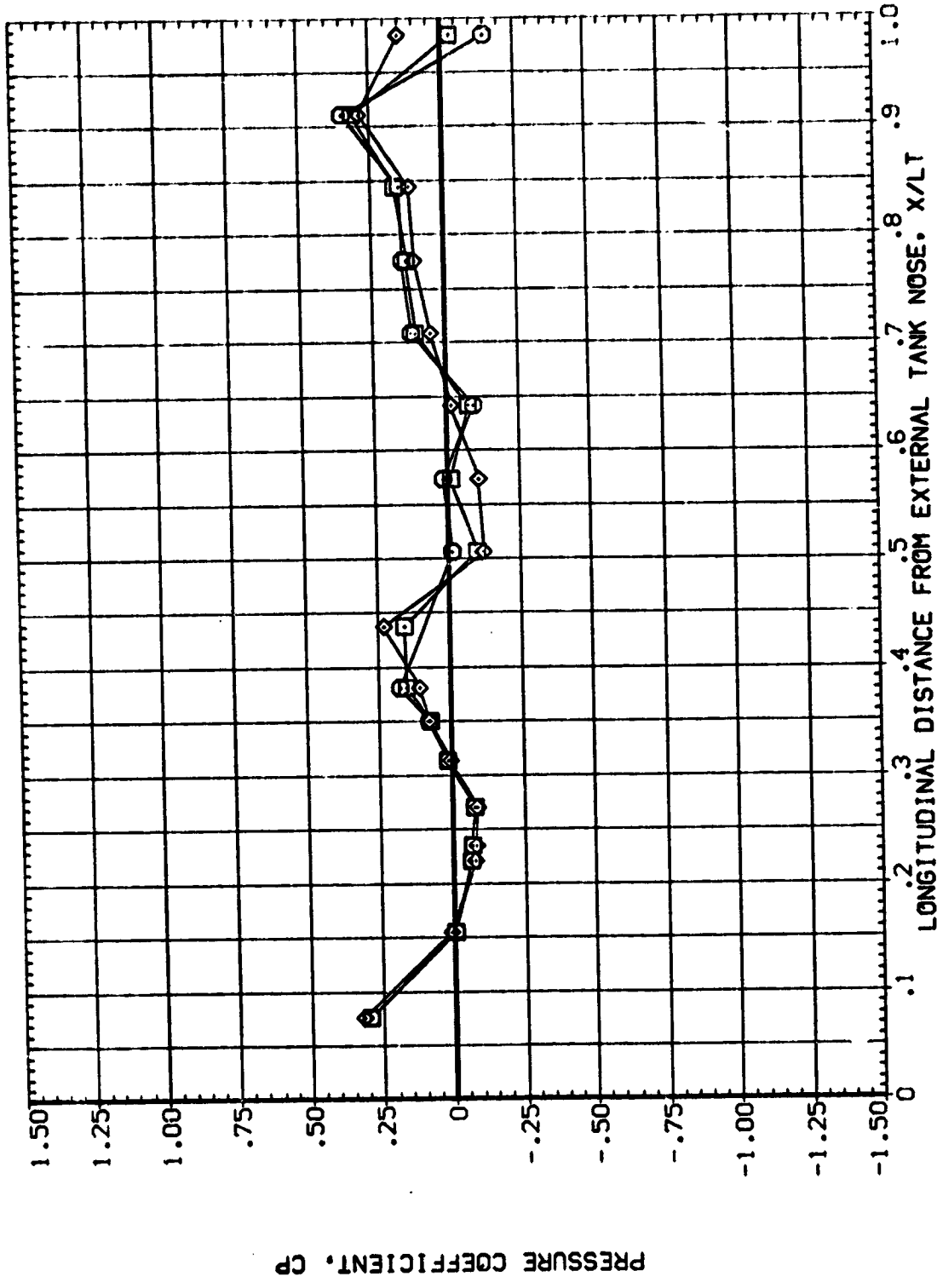
SYMBOL		PHI		ALPHA		MACH		REFERENCE DATA		BETA		PARAMETRIC VALUES	
◇	324.000	324.000	342.000	.000	1.560			SREF	6.198	SO. IN.	.000	CONF IG	90.000
	342.000							LREF	5.313	IN.	.140	R-UDDER	.000
	360.000							BREF	5.313	IN.	.000	OS-ING	.500
								XMRP	2.548	IN.			
								YMRP	.000	IN.			
								ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

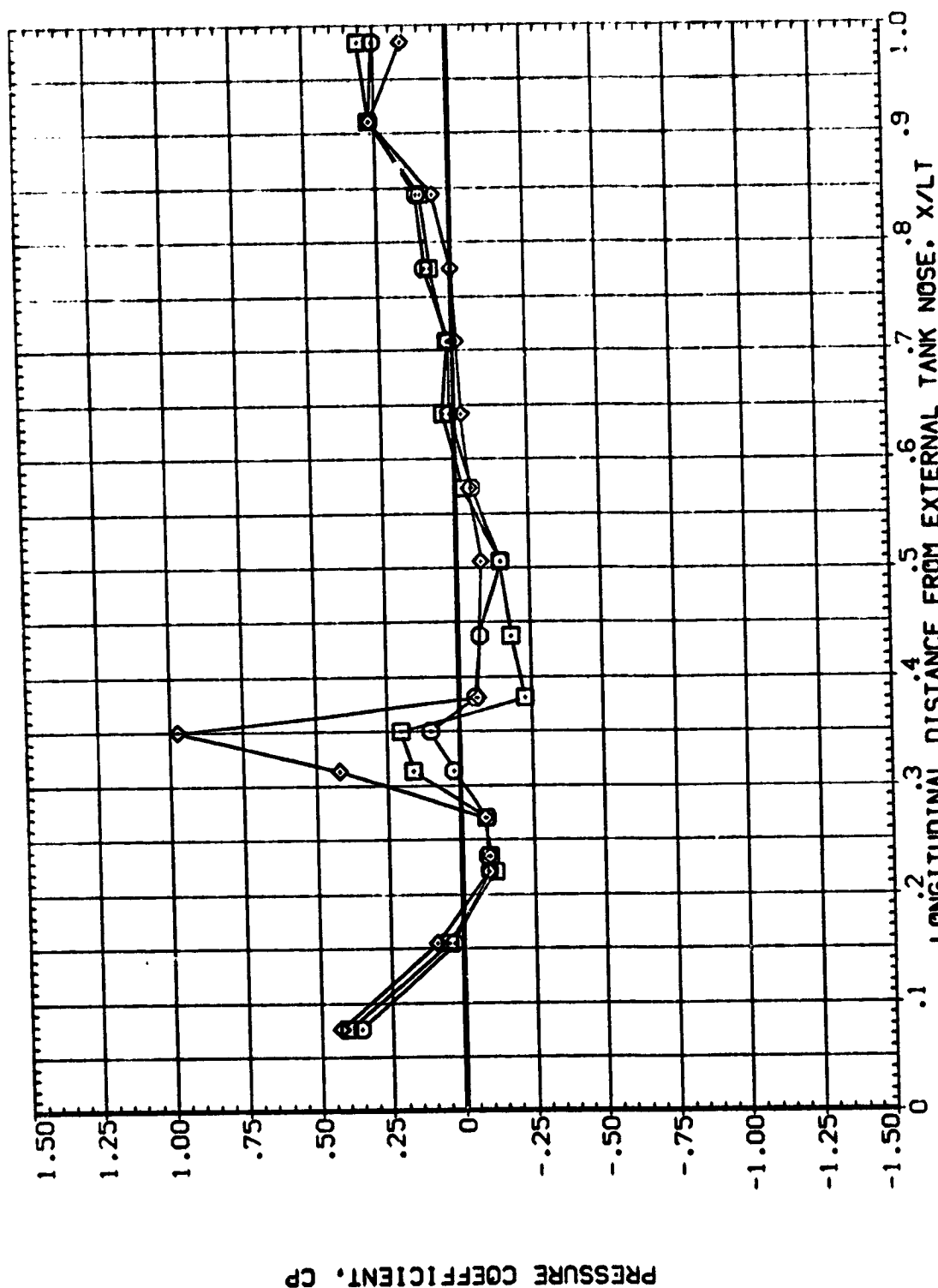
SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	18.000	36.000	8.000	1.960			SREF	6.198	50. IN.	BETA	CONF IG	90.000		
○							LREF	5.313	IN.	DELTA Z	.000	RCORR	.500	
□							BREF	5.313	IN.	X-SRB	.000	DRRINC	.500	
◇							XMRP	2.549	IN.					
							YMRP	.000	IN.					
							ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	RUDER	ORBIT
◇	54.000	8.000	1.960	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	72.000							Y-SRB	.000	.000	.000
○	90.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

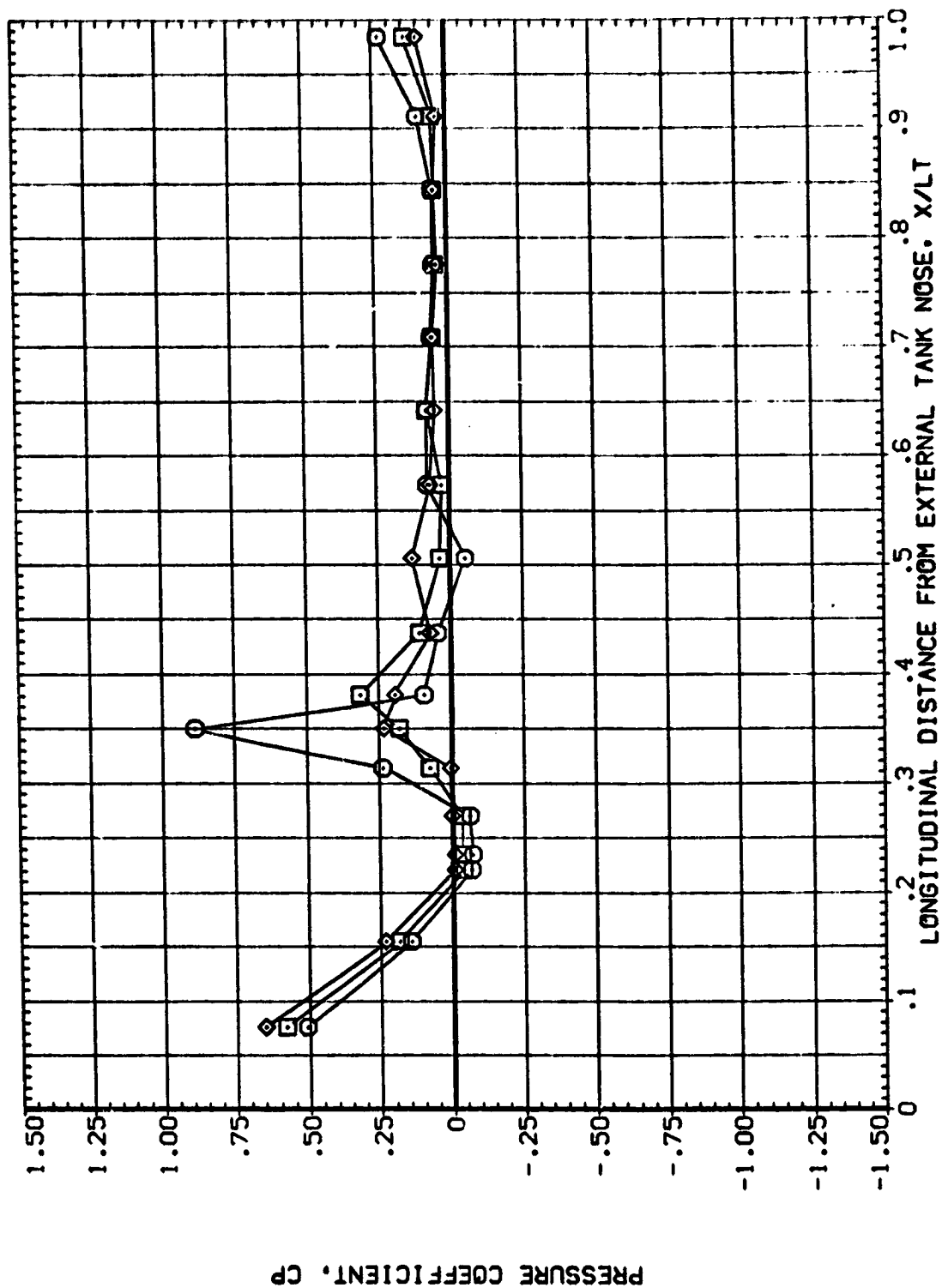
PHI  
108.000  
126.000  
144.000

ALPHA  
8.000

MACH  
1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

PARAMETRIC VALUES  
BETA  
DELTA Z  
X-SRB  
CONFIG  
.000  
.140  
.000  
RUDDER  
.000  
DRBINC  
.000  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSEC 567(1A32F) T9 S3/2 S3/2 03

## SYMBOL

PHI  
162.000  
180.000  
198.000

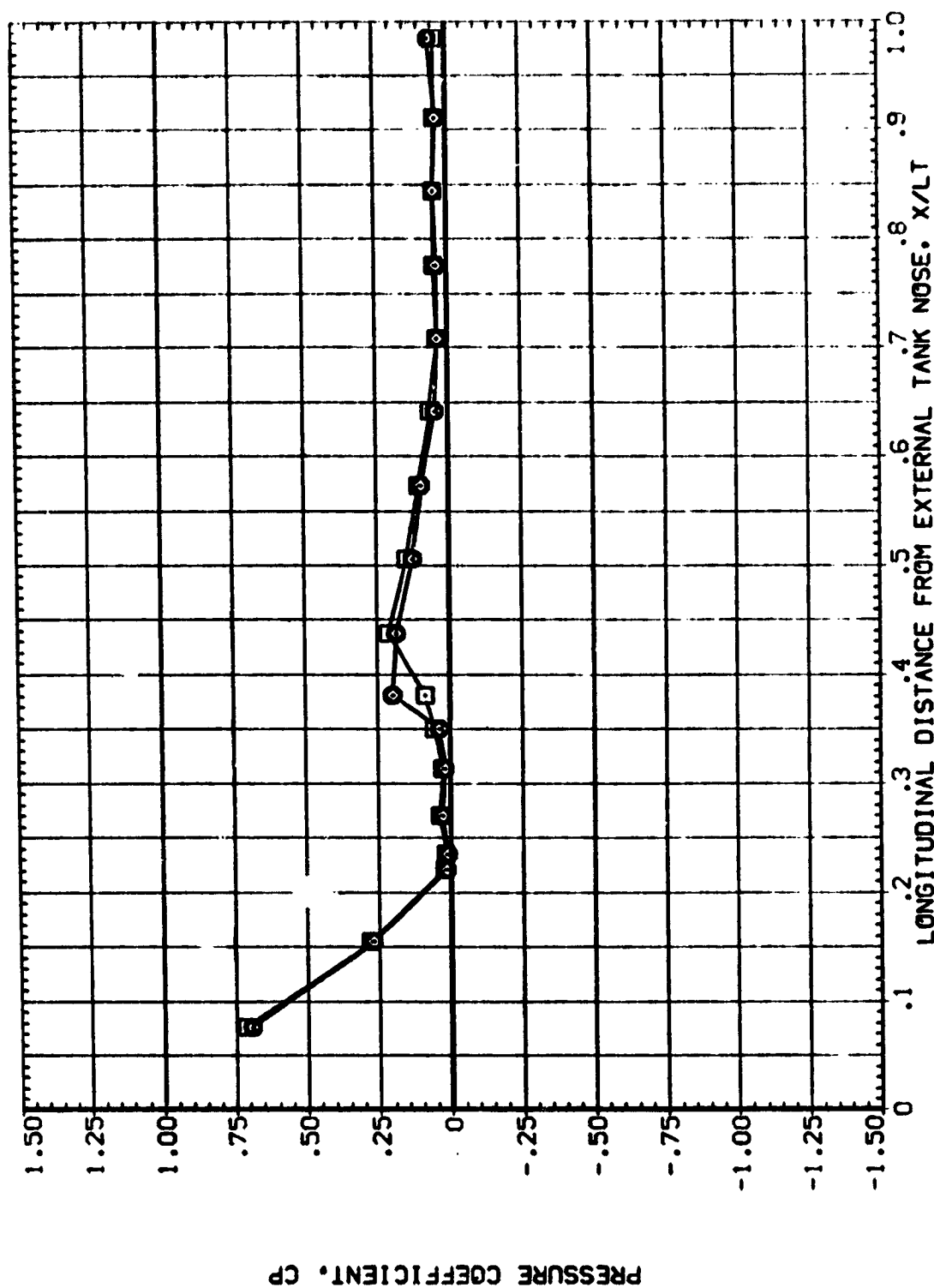
ALPHA	MACH
8.000	1.96

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LREF
BREF
XMRP
YMRP
ZMRP

BETA  
ZETA  
X-X

### PARAMETRIC VALUES

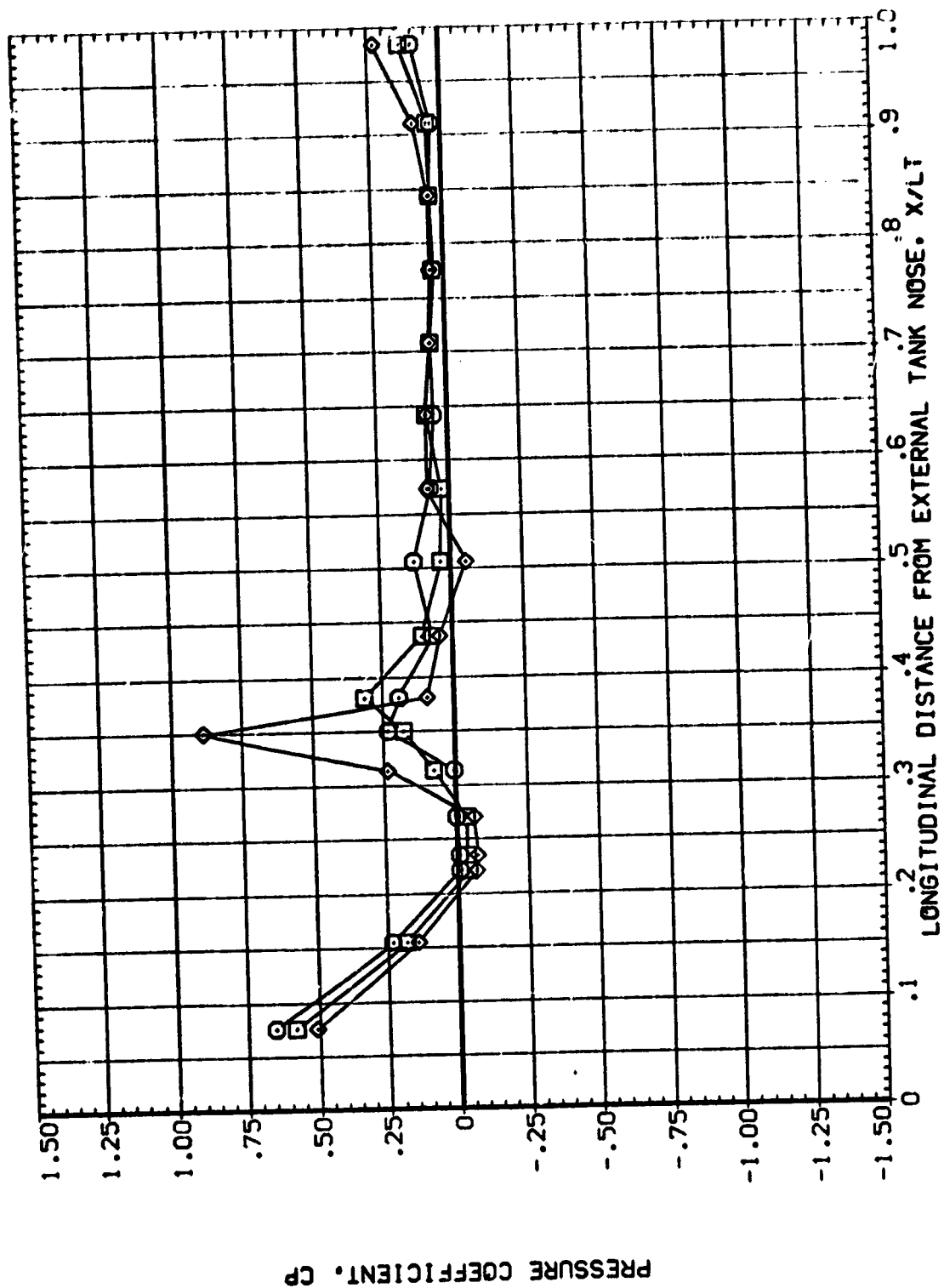
305.  
000.  
90.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XTRP	BETA	CON-TIG	RUDDER	ORBITAL
□	216.000	8.000	1.960	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	234.000							X-SRB	.000	.000	.500
◇	252.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
○  
□  
◇

PMI  
270.000  
288.000  
306.000

ALPHA  
8.000

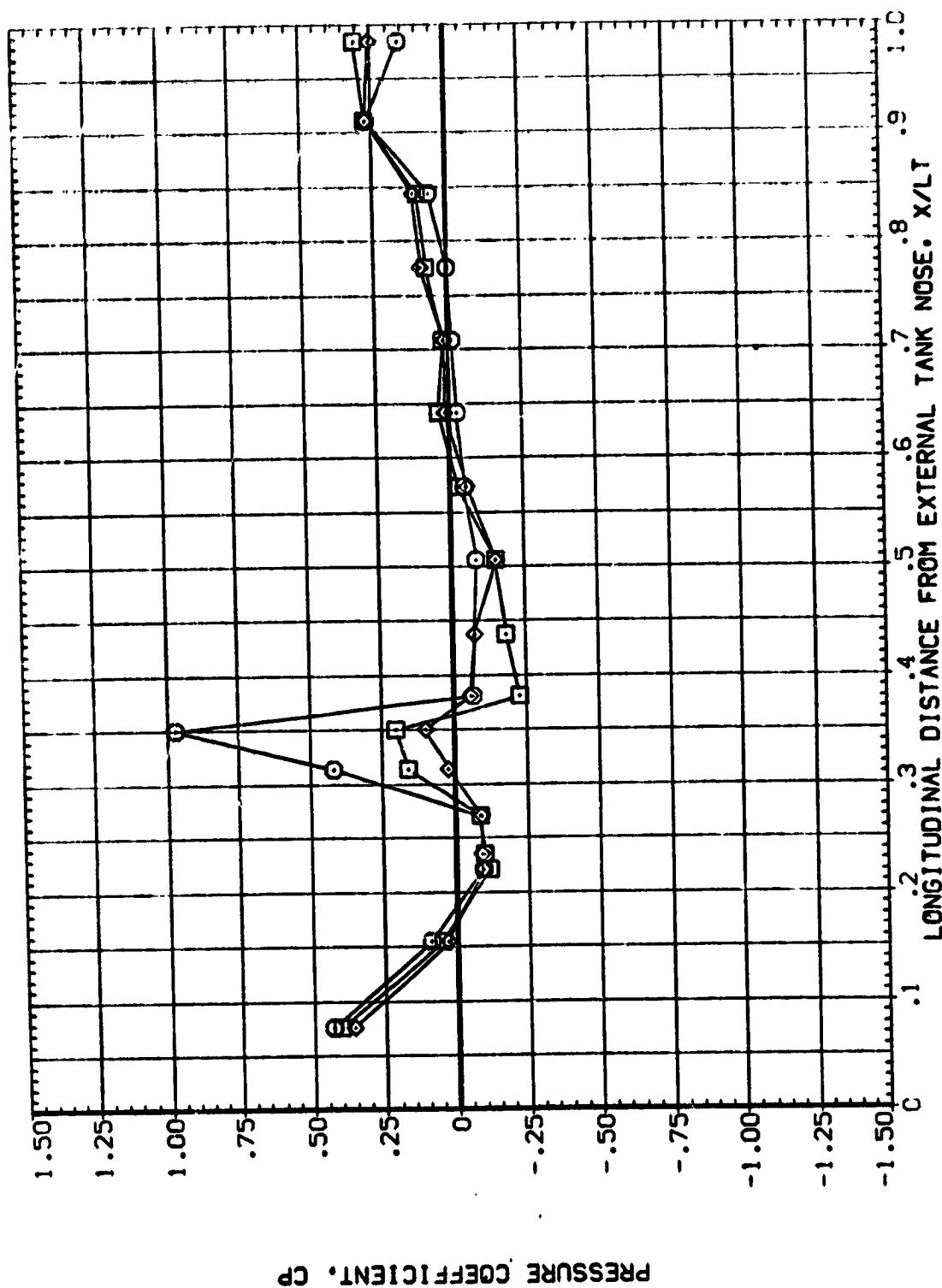
MACH  
1.960

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LREF 5.313  
XREF 5.313  
XMRP 2.549  
ZMRP .000

SQ. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SF3

PARAMETRIC VALUES  
.000  
.000  
.000  
.000  
.000



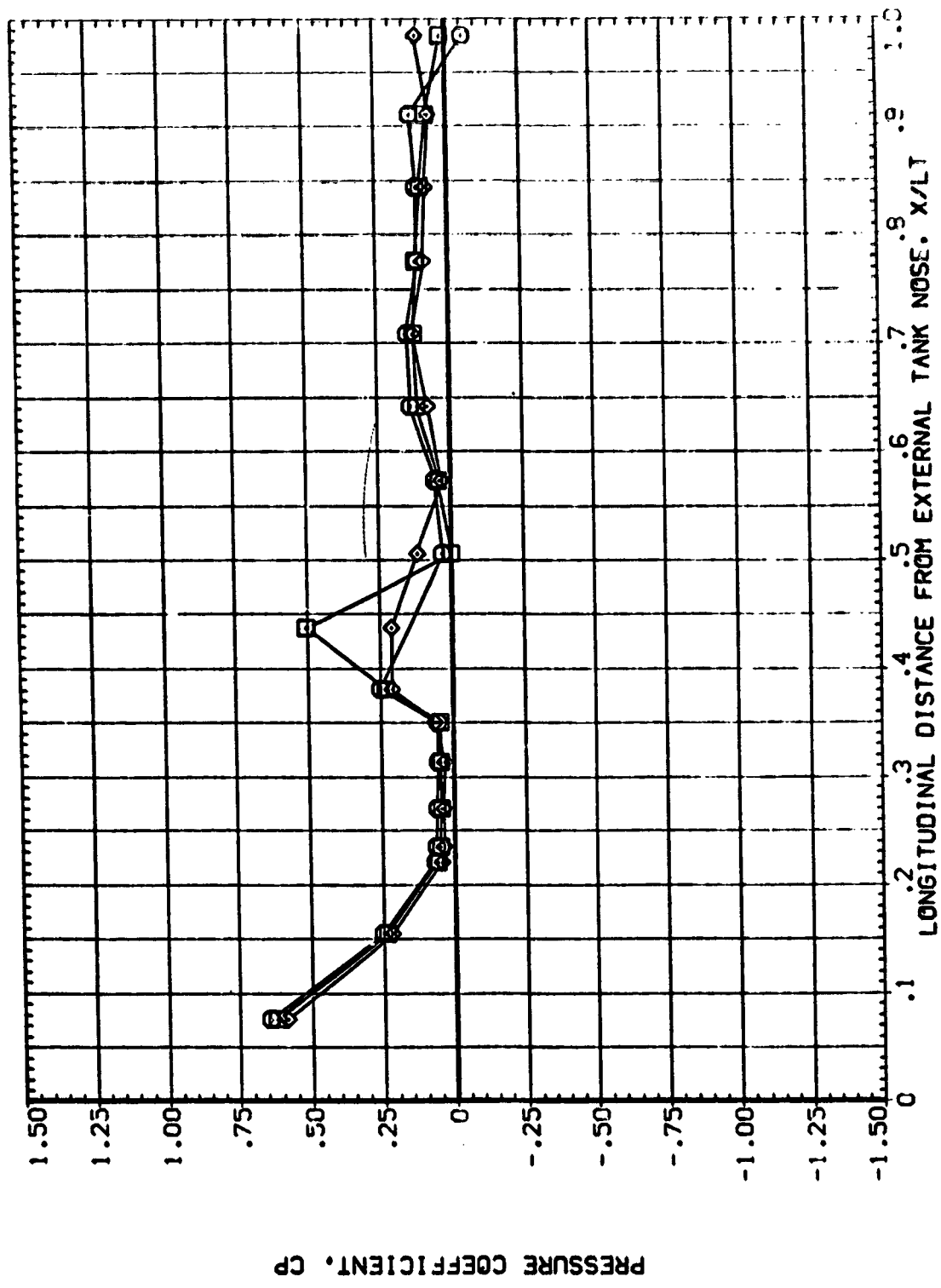
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

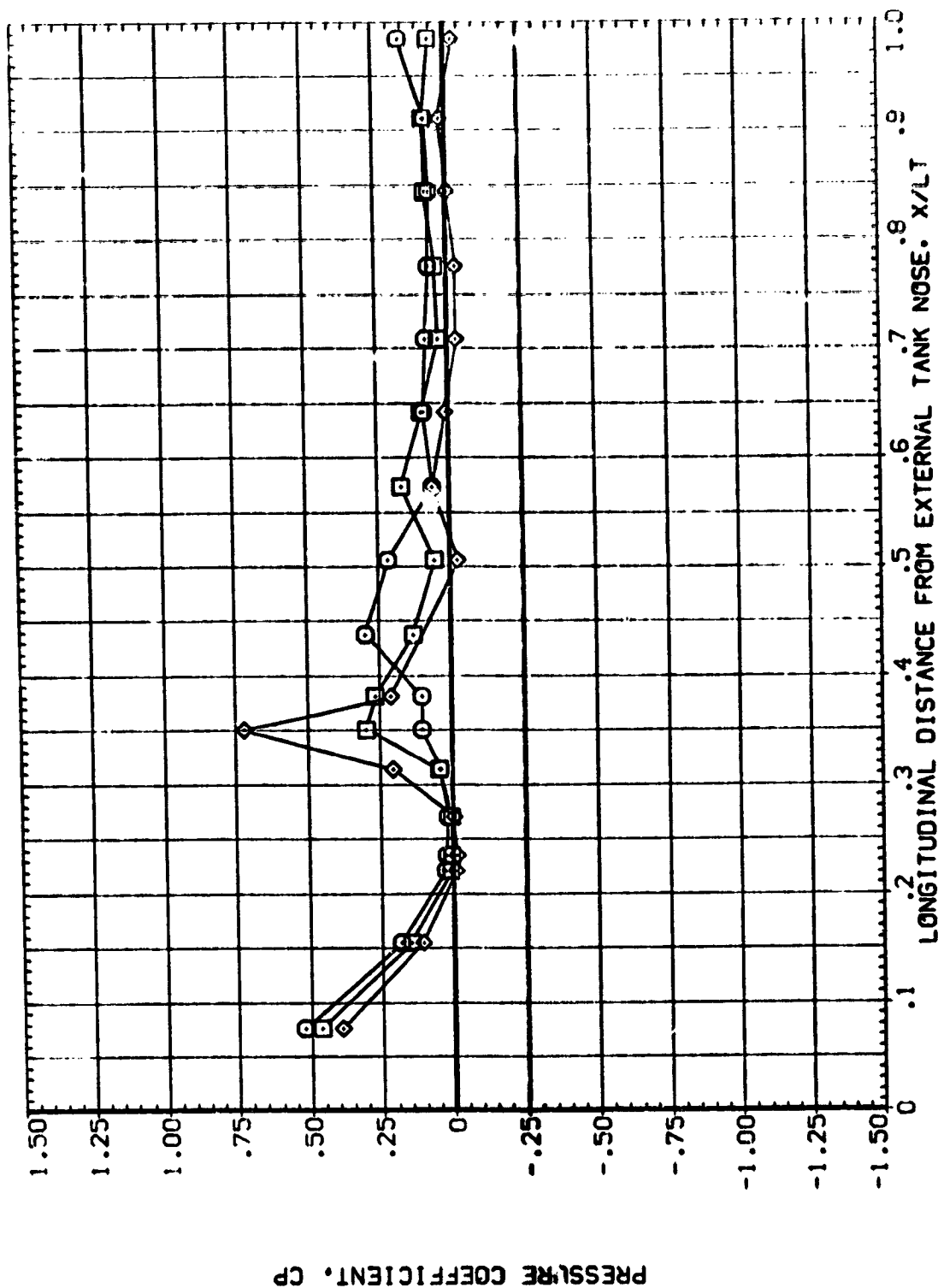
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				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONTS	DELTAZ
◇	.000	-8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTAZ	.000	.000
□	18.000							IN.	X-S98	.000	.000
◇	36.000							IN.		.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

REFERENCE DATA			PARAMETRIC VALUES		
PHI	ALPHA	MACH	SPEC	BETA	CONFIS
54.000	-8.000	3.500	6.198	.000	.000
72.000			5.313	DELTAZ	.000
90.000			5.313	1-SGR	.000
			2.549		
			.000		
			.000		
			.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A92701)

SYMBOL

PHI  
108.000  
126.000  
144.000

ALPHA  
-8.000  
3.500

MACH  
3.500

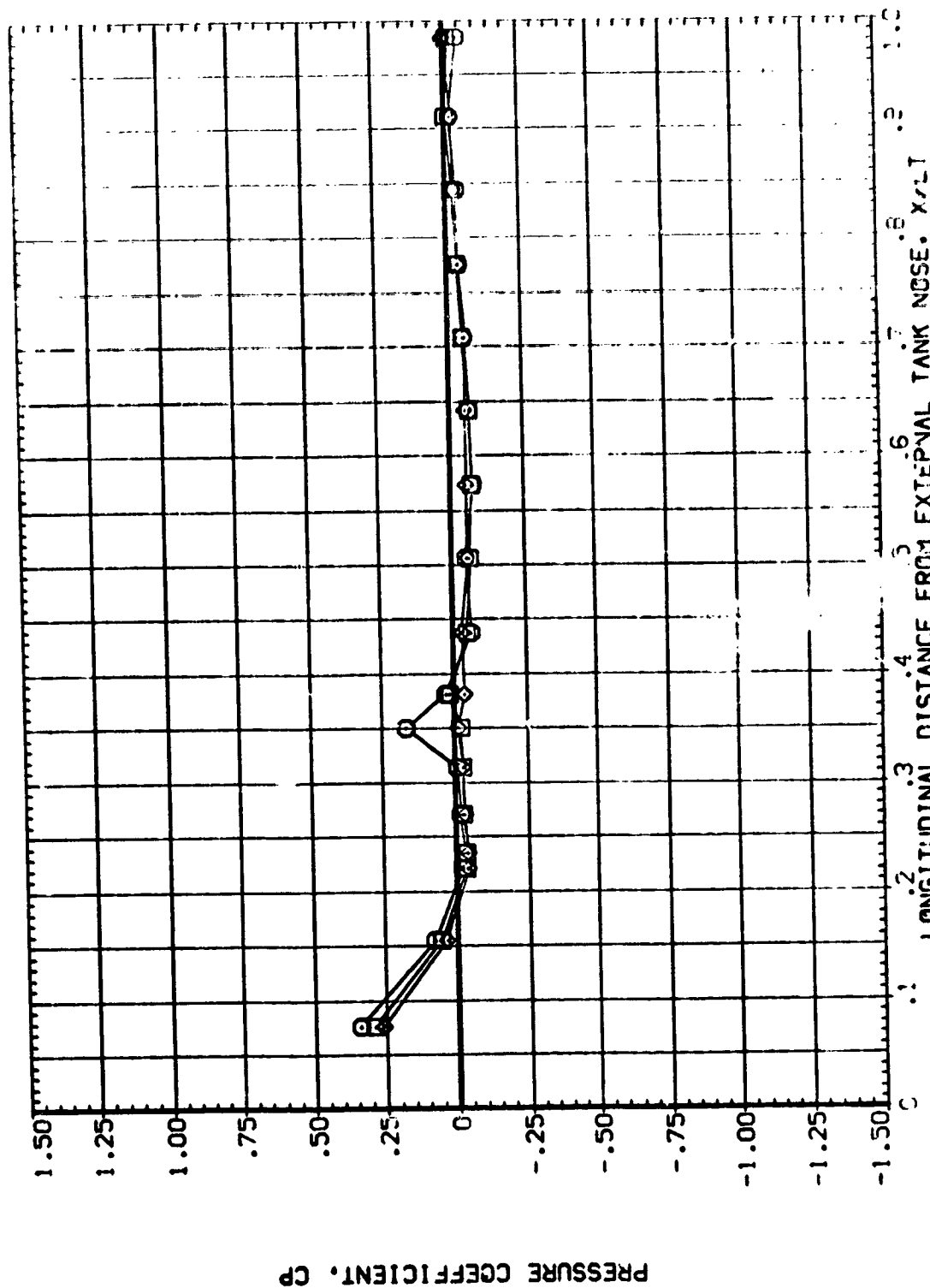
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YMRP .000  
ZMRP .000

SD, IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA  
DELTA  
DELTA

PARAMETRIC VALUES  
CONFID  
CONFID  
CONFID  
CONFID

CONFID  
CONFID  
CONFID



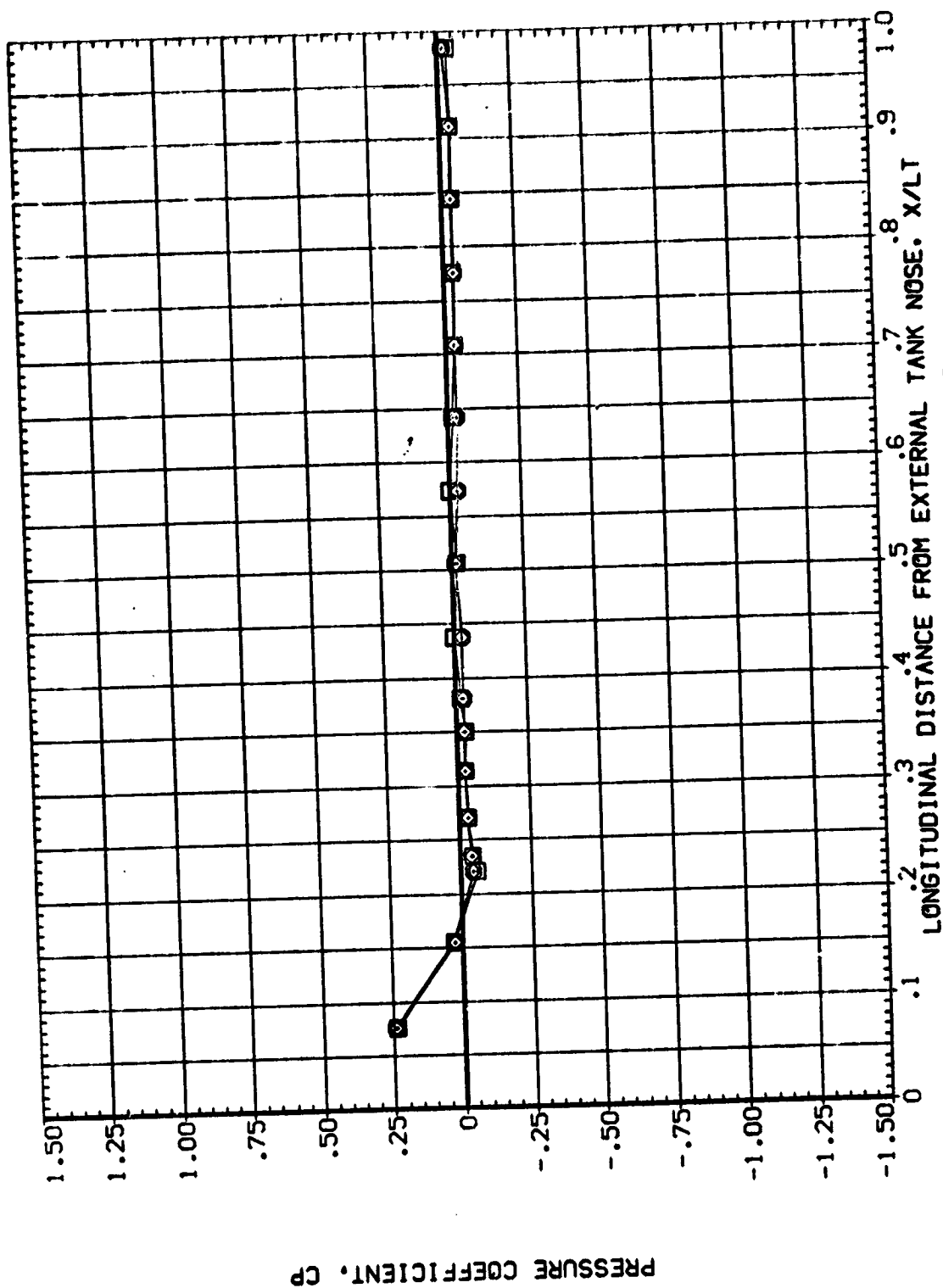
LONGITUDINAL DISTANCE FROM EXTERNAL TANK NOSE, X/LT

PRESSURE DISTRIBUTION ON EXTERNAL TANK T-33/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

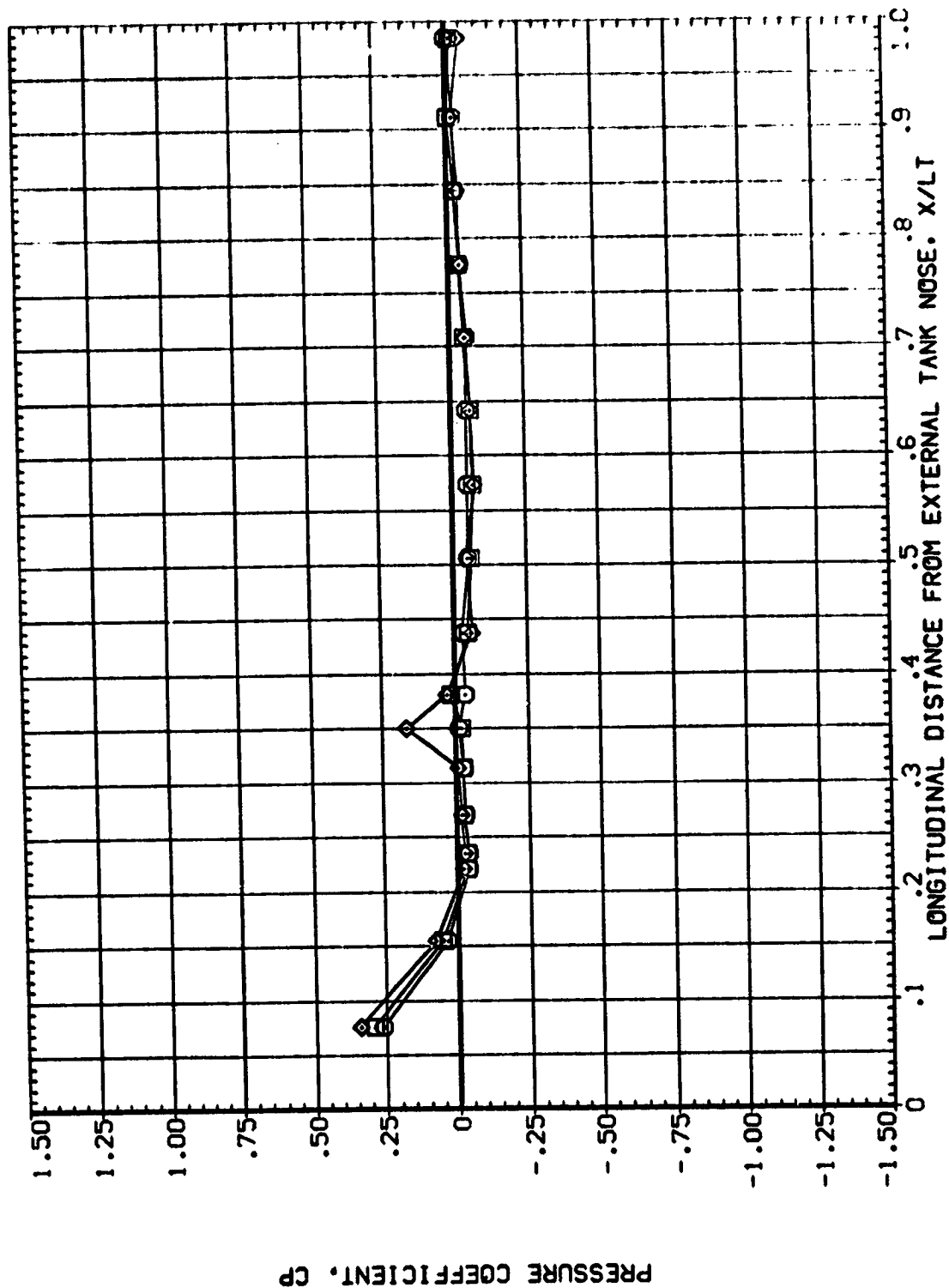
SYMBOL	PHI		ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	162.000	180.000			SREF	LREF	BREF	XTRP	BETA	CONF IG	RUDDER	ORBITAL
□	162.000	180.000	-8.000	3.500	6.198	5.313	5.313	2.548	DELTA Z	.000	.140	.000
◇	138.000								X-SRB			.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

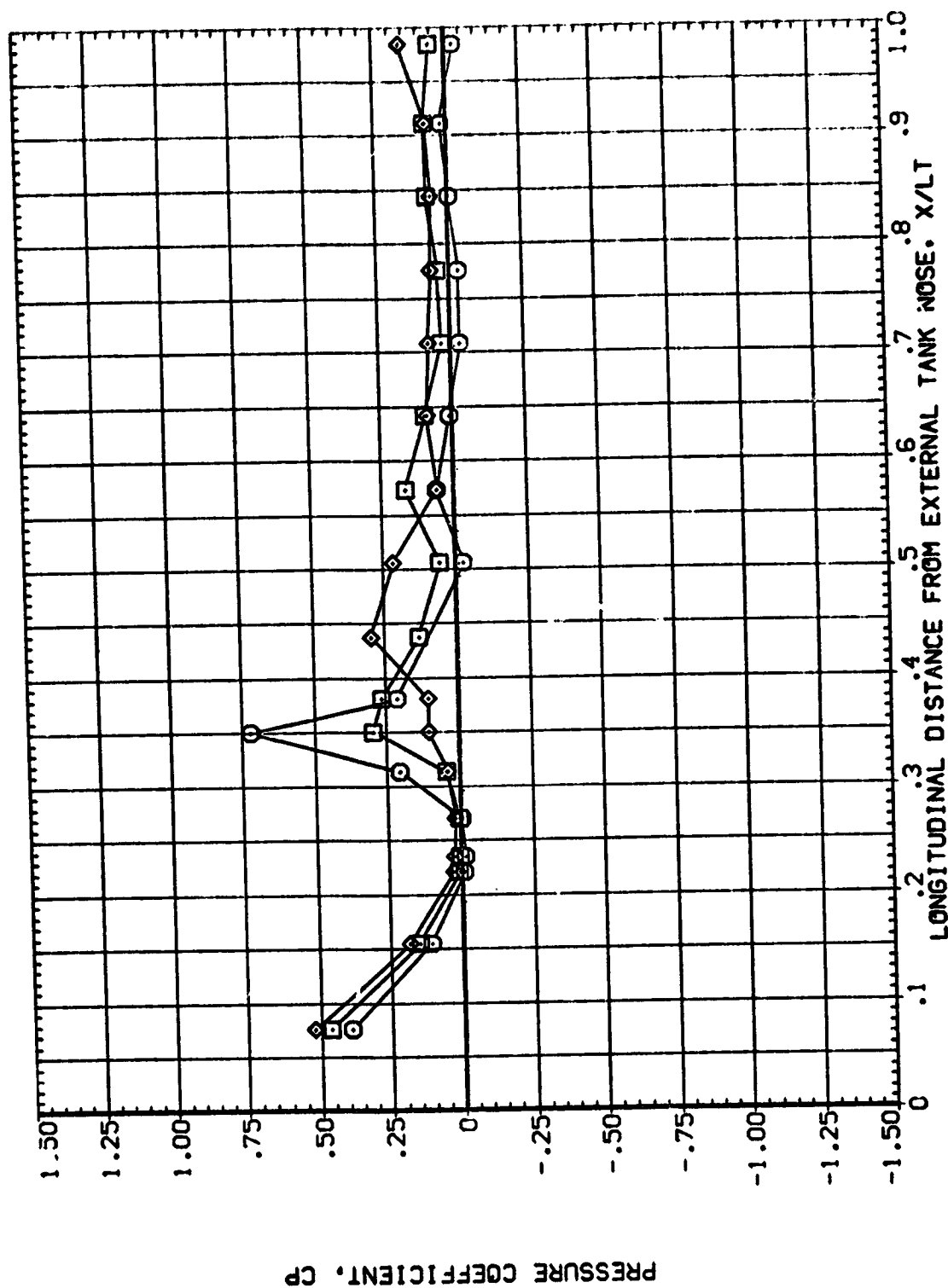
SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	216.000	234.000	-8.000	-8.000	3.500	3.500	SREF	LREF	BREF	XMRP	SD, IN.	BETA	CONFIS	90.000
□							5.313	5.313	5.313		IN.	DELTA Z	.000	.000
◇							2.549	2.549	2.549		IN.	X-SRB	.000	.500
							.000	.000	.000		IN.			
							ZMRP							



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82TC1)

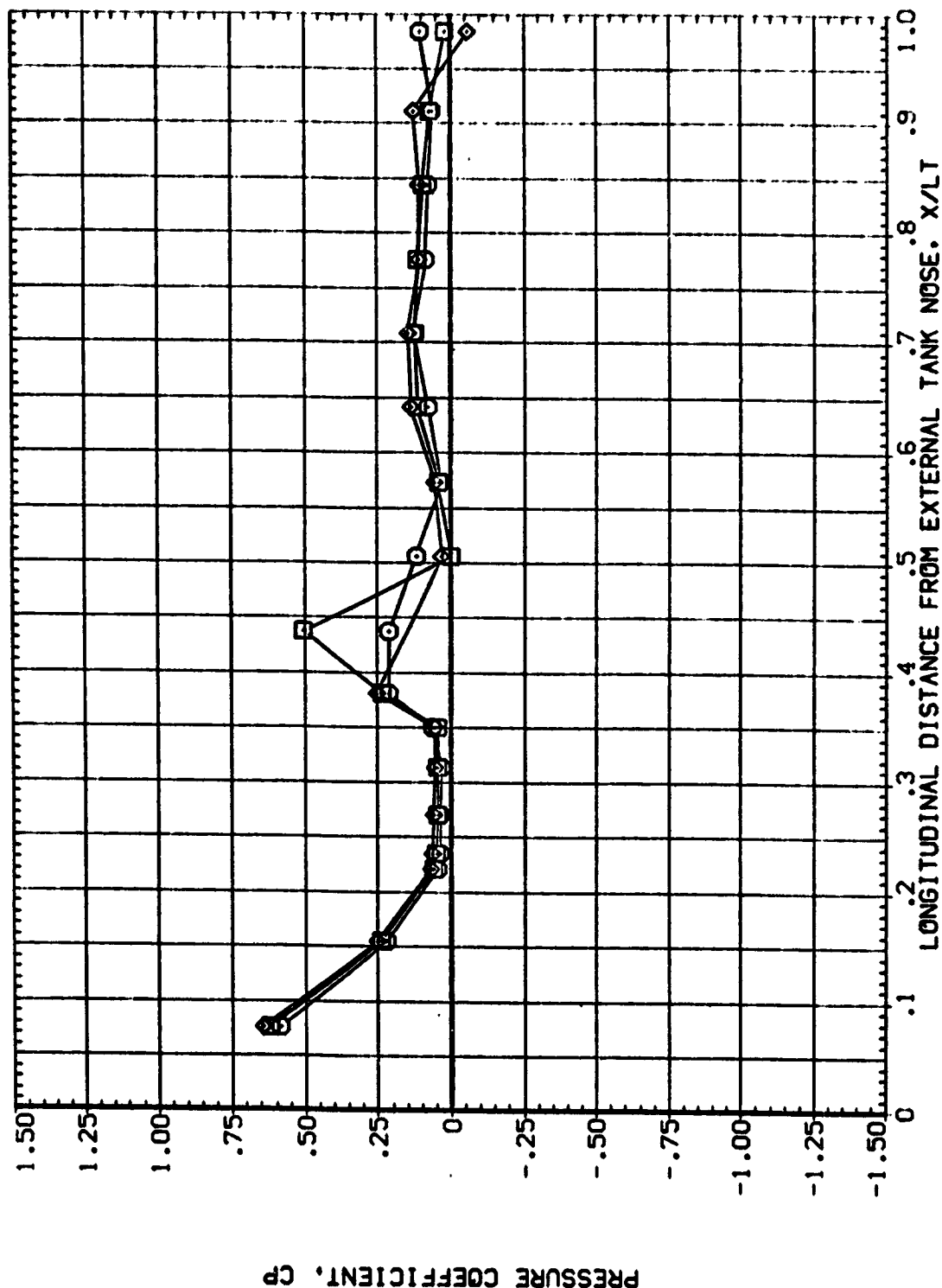
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONFIS	RUDDER	ORBNIC
○	270.000	-8.000	3.500	6.198	5.313	5.313	2.548	DELTAZ	.000	.140	.000
□	288.000							X-SRB	.000	.000	.500
◇	306.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	BETA	CONF IG	BLDGR	DRBINC
□	324.000	-8.000	3.500	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	342.000							X-SRB	.000	.000	.500
◇	360.000										

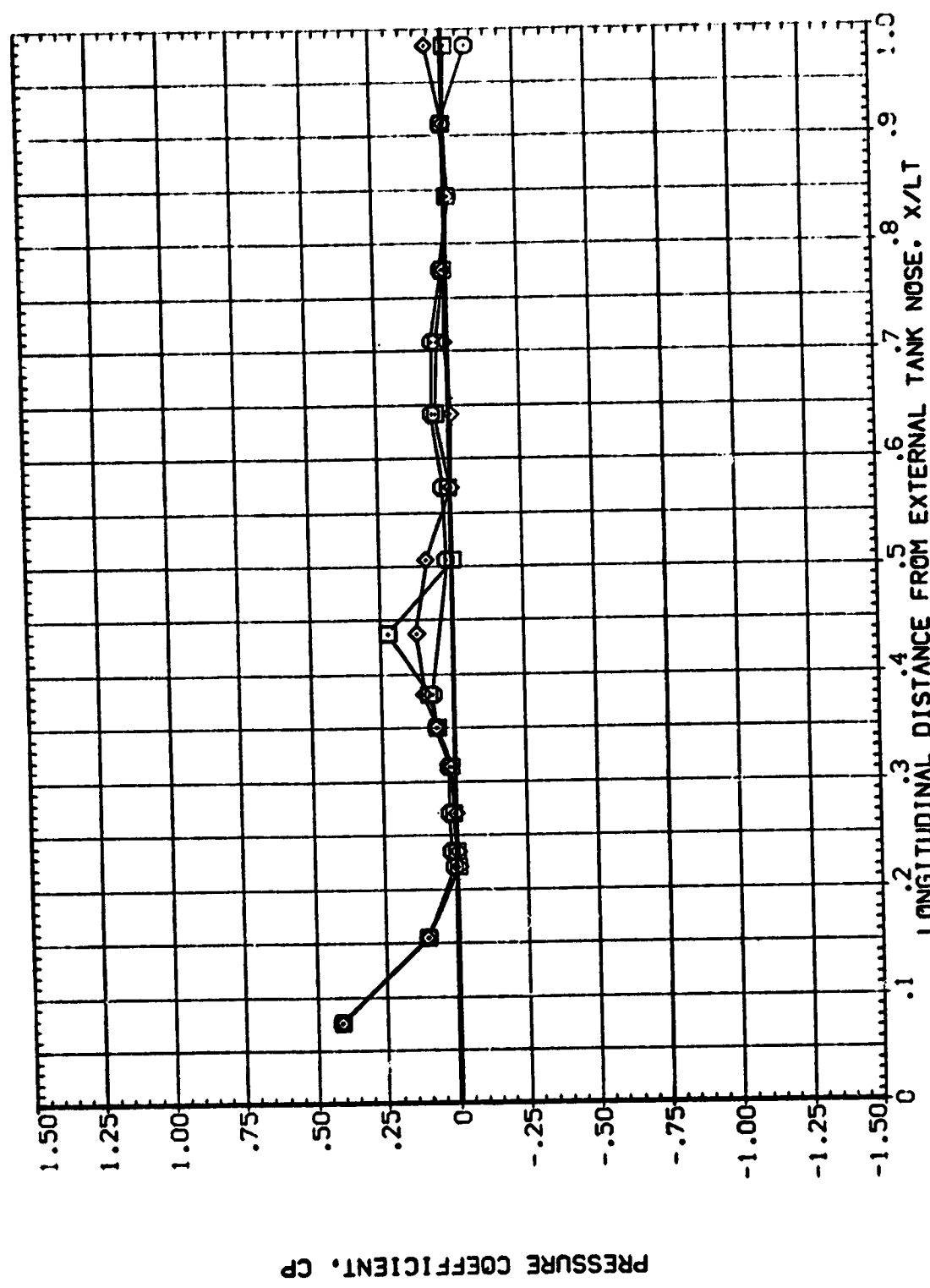


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MS=C 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82TC1)

SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	0.000	18.000	.000	.000	3.500		SREF	BETA	CONF13	90.000
□							LINEP	DELTAZ	RUBBER	.000
◇							SPREF	X-SRB	.000	.000
							YMRP		.000	.500
							ZMRP			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82101)

SYMBOL  
 ○  
 □  
 ◇

PHI 54.000  
 72.000  
 90.000

ALPHA .000

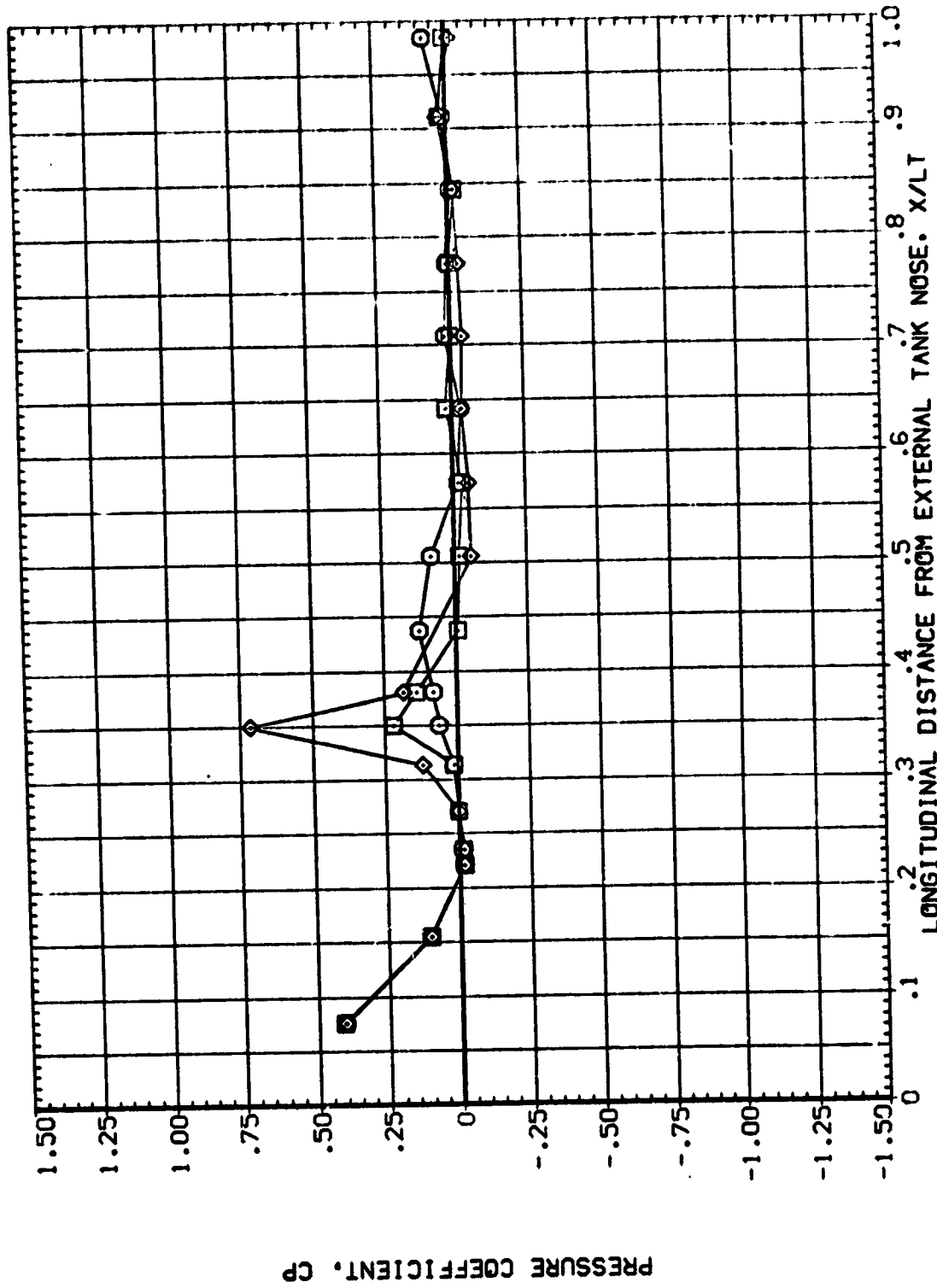
MACH 3.500

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 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA Z  
 V-SRB

PARAMETRIC VALUES  
 .000 CONFIG  
 .140 RUDDER  
 .000 ORBINC  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

SYMBOL

PHI  
108.000  
126.000  
144.000

ALPHA

**MACH**  
**3.500**

REF  
SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP

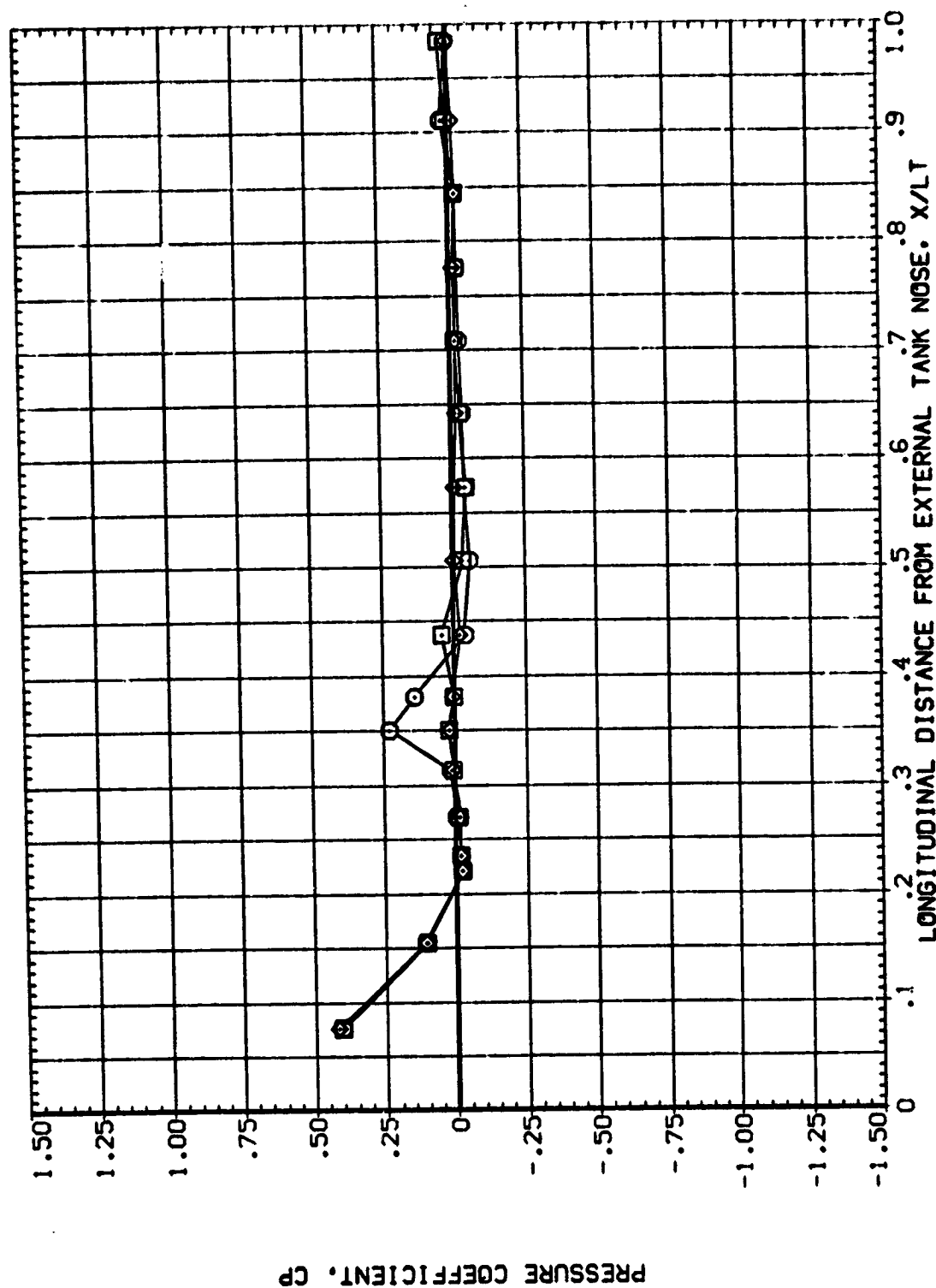
DATA	198
	313
	313
	549
	.000
	.000

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zzzzzz

BETA  
DELTA Z  
X-SRB

PARAMETRIC VALUES

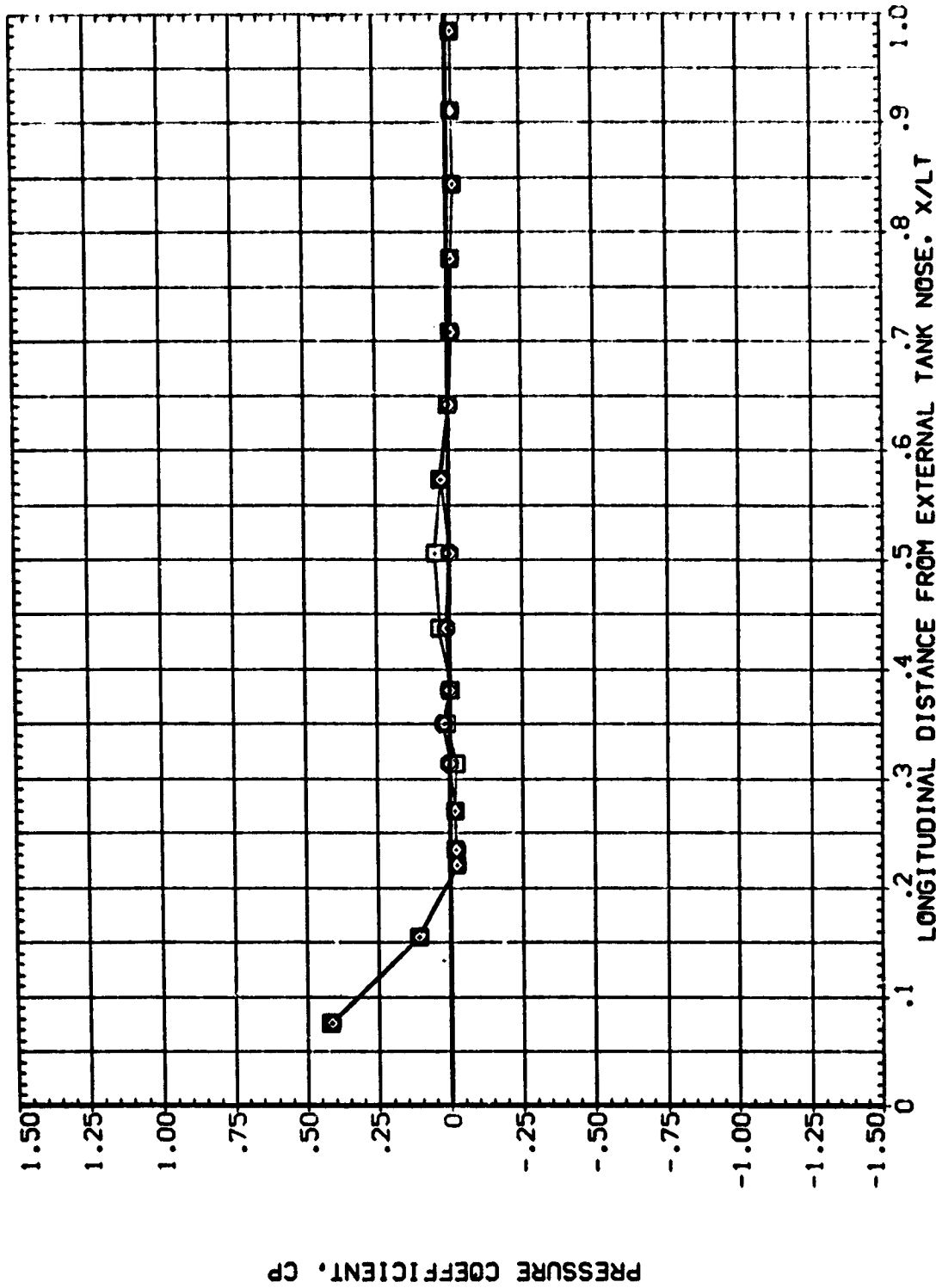
500.00  
1000.00  
1500.00



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO, IN.	DELTA	CONFUS	90, IN.
○	162,000	.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA	.000	CONFUS
□	180,000							IN.	X-SRB	.140	R-COER
◇	198,000							IN.		.000	PSBINE
								IN.			.500
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL  
○  
□  
◇

PHI  
216.000  
234.000  
252.000

ALPHA  
.000

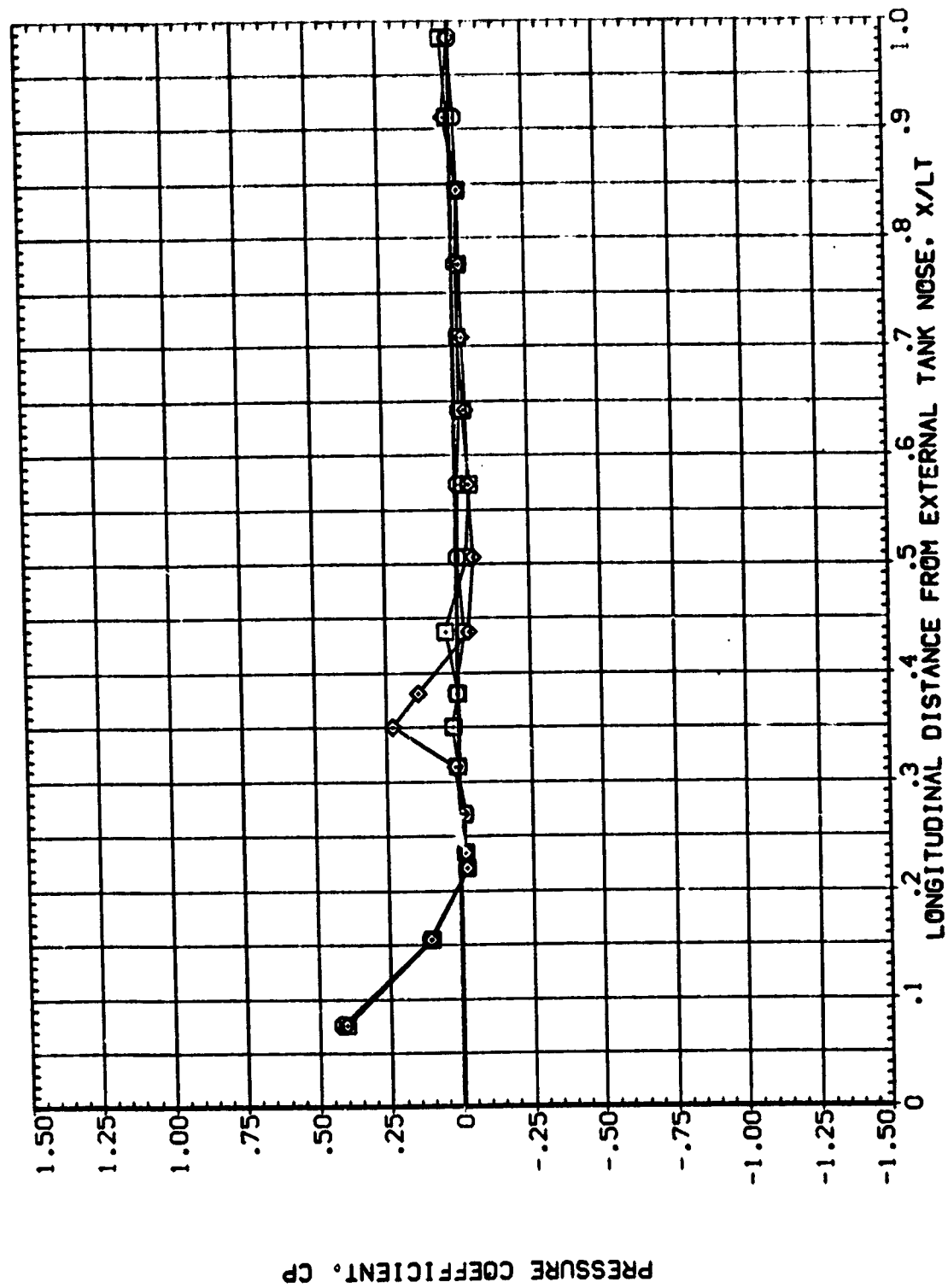
MACH  
3.500

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP .000  
ZPRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SRB

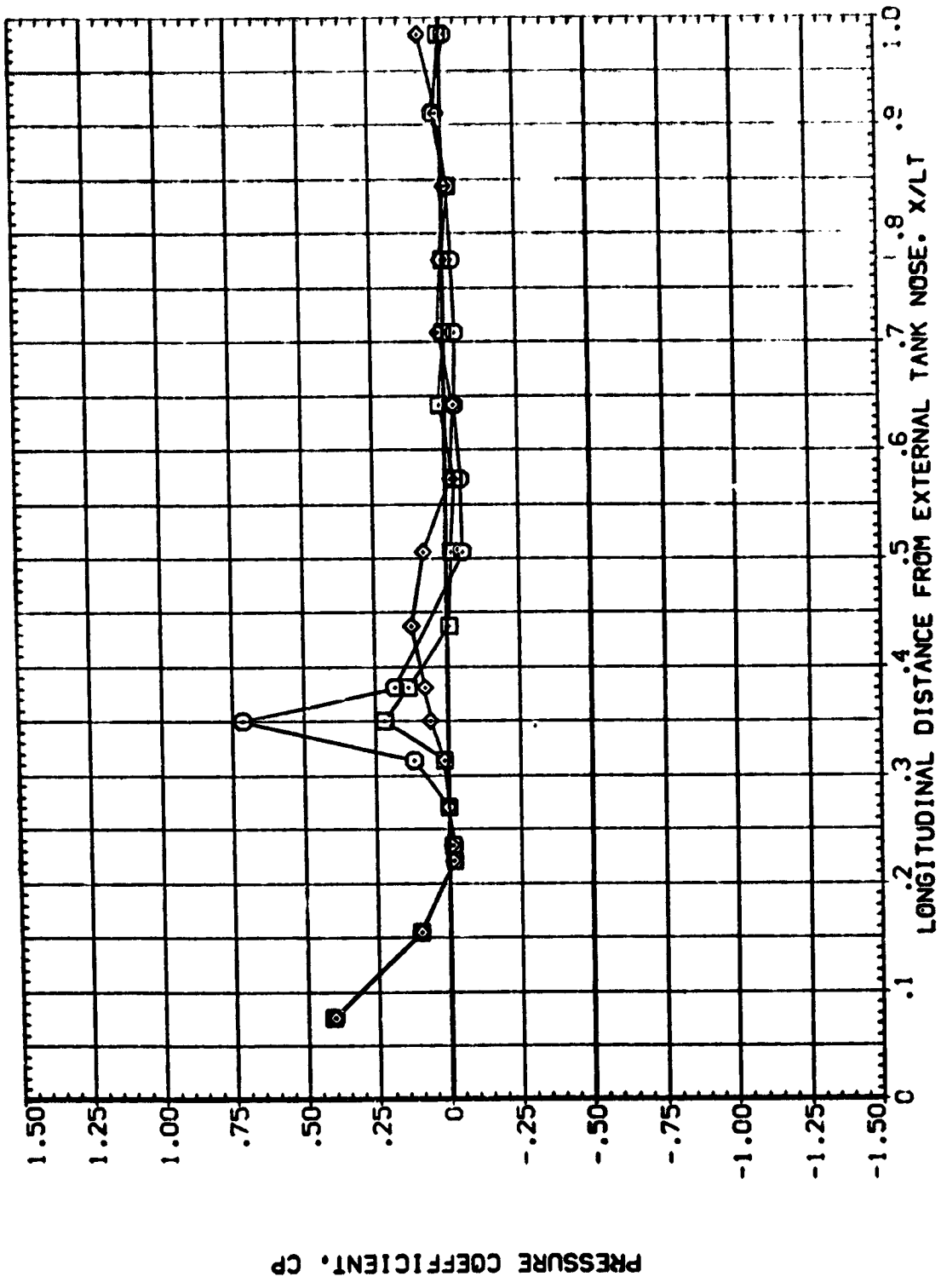
PARAMETRIC VALUES  
CONF IG .000  
RUDDER .140  
ORBIT INC .000  
ORBIT INC .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	270.000	288.000	.000	.000	3.500		SREF LREF BREF XREF YREF ZREF	50. IN. IN. IN. IN. IN. IN.	BETA DELTA Z X-REF	CONF IG RUDDER ORBITAL
□							5.198 5.313 5.313 2.949 .000 .000		.000 .140 .000	.90.000 .000 .500
◇										

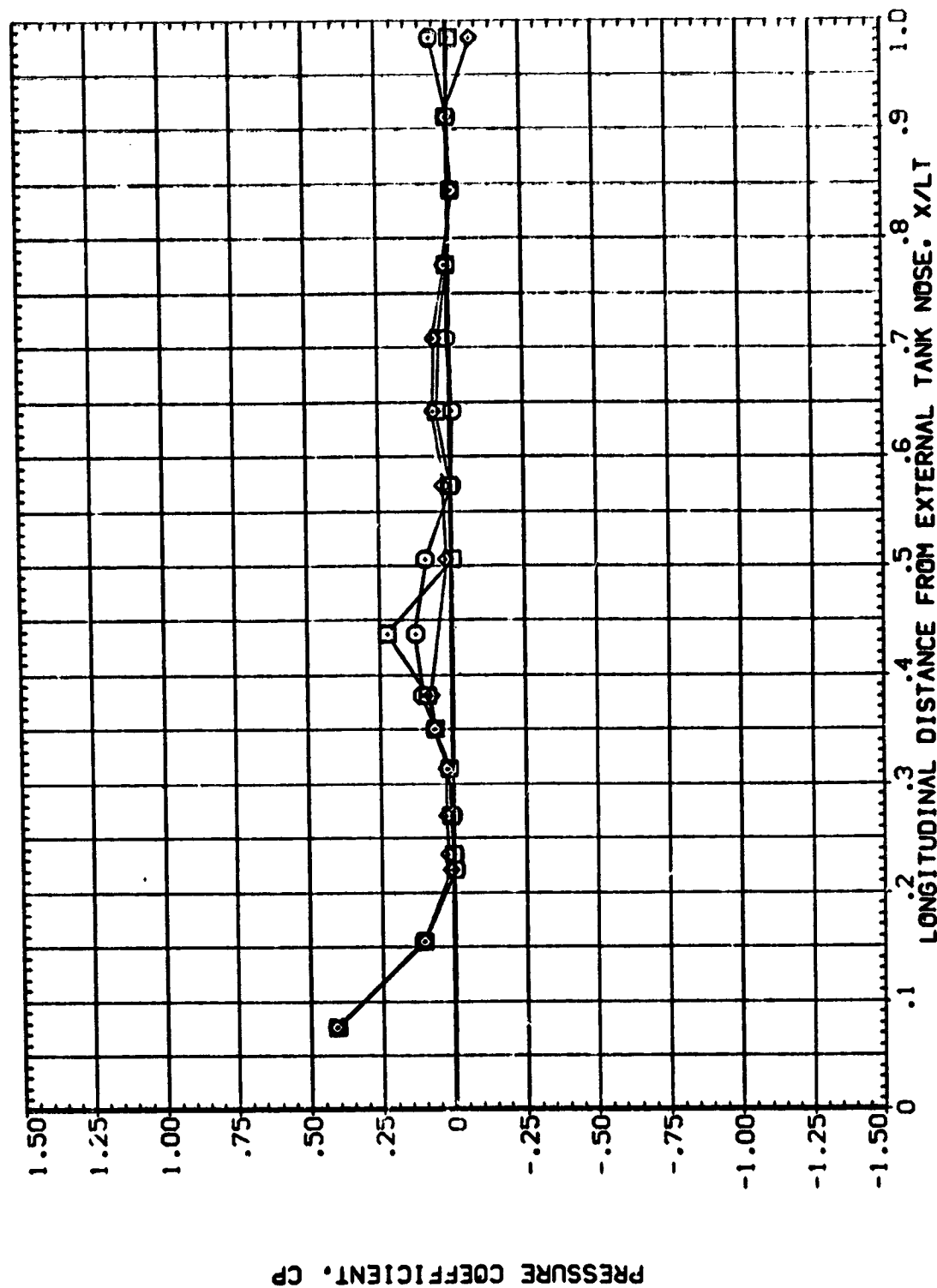


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A821C1)

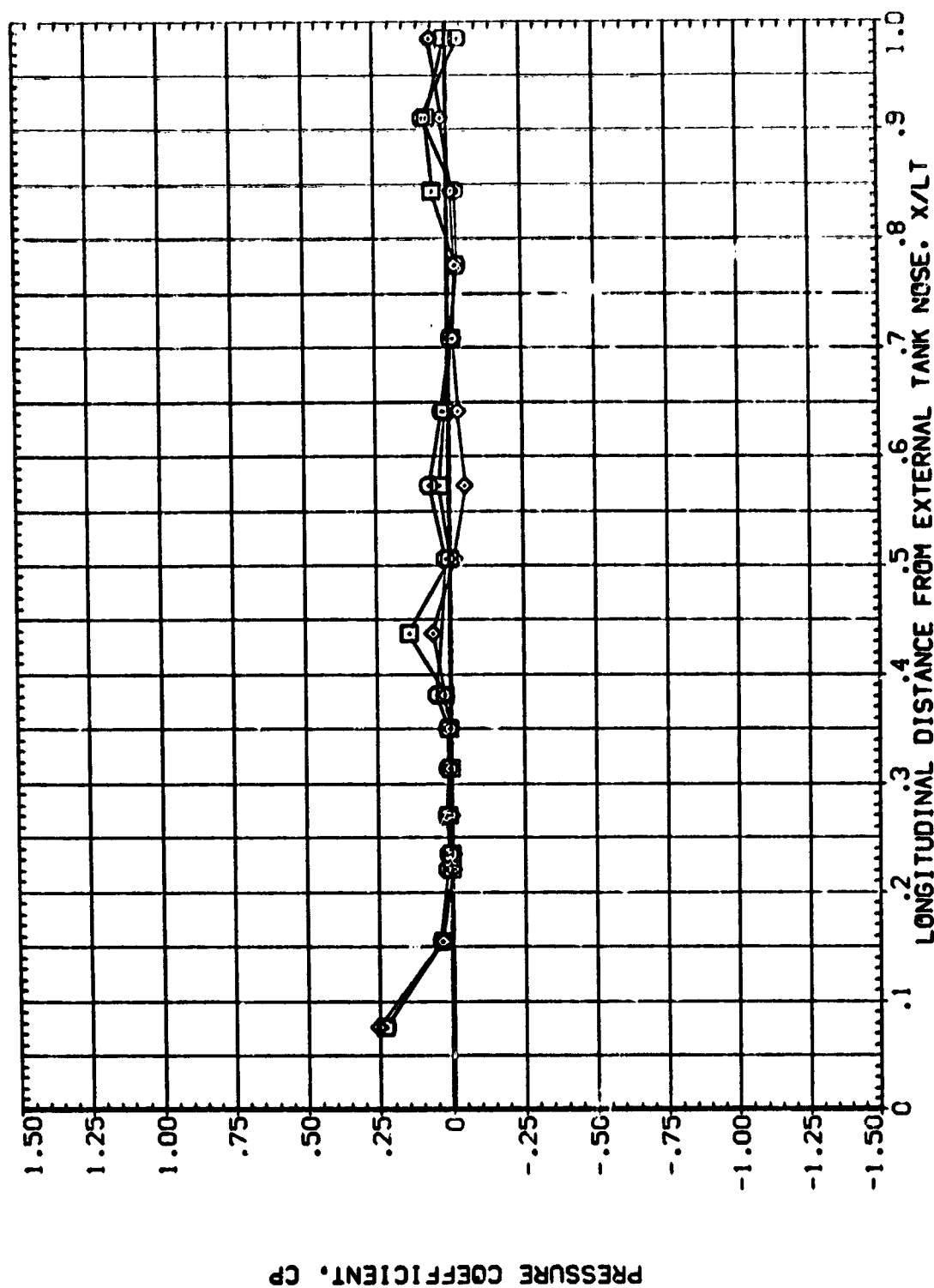
SYMBOL	PMI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONFIS	RUCOR	CONFIC
□	324.000	.000	3.500	6.198	5.313	5.313	.000	DELTAZ	.000	.140	.000
◇	342.000			2.549				X-SRB	.000		.500
◇	360.000			.000							
				ZMRP							
				.000							
				.000							



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T3 S3/2 S3/2 03 EXTERNAL TANK (A82TC1)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	BETA	DELTA Z	DELTA T	DELTA T
□	.000	8.000	3.500	5.198	5.313	5.313	2.549	.000	.140	.000	.000
◇	18.000			5.313	5.313	5.313	2.549	.000	.140	.000	.000
◇	36.000			2.549	2.549	2.549	2.549	.000	.140	.000	.000



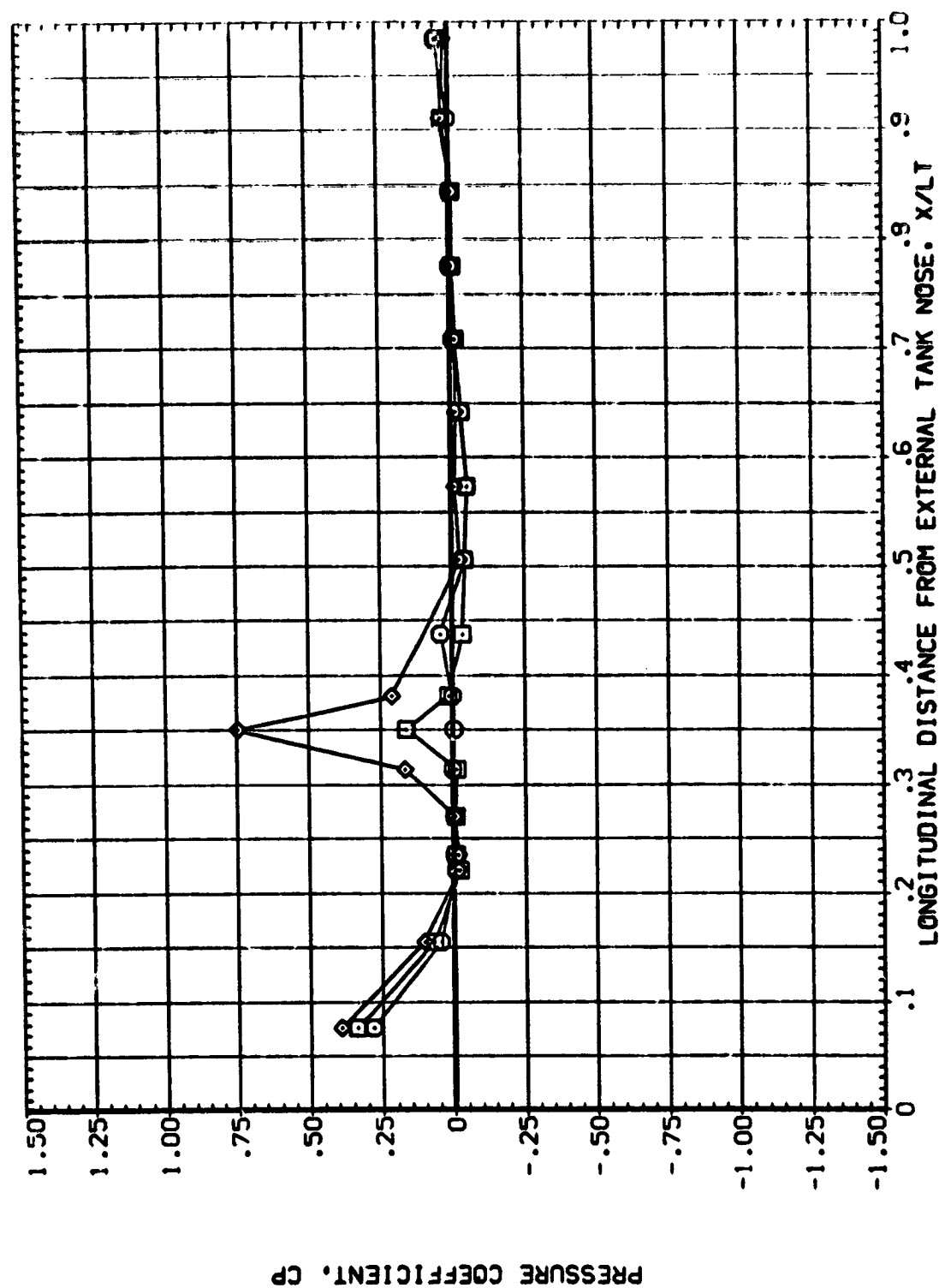
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A92T01)

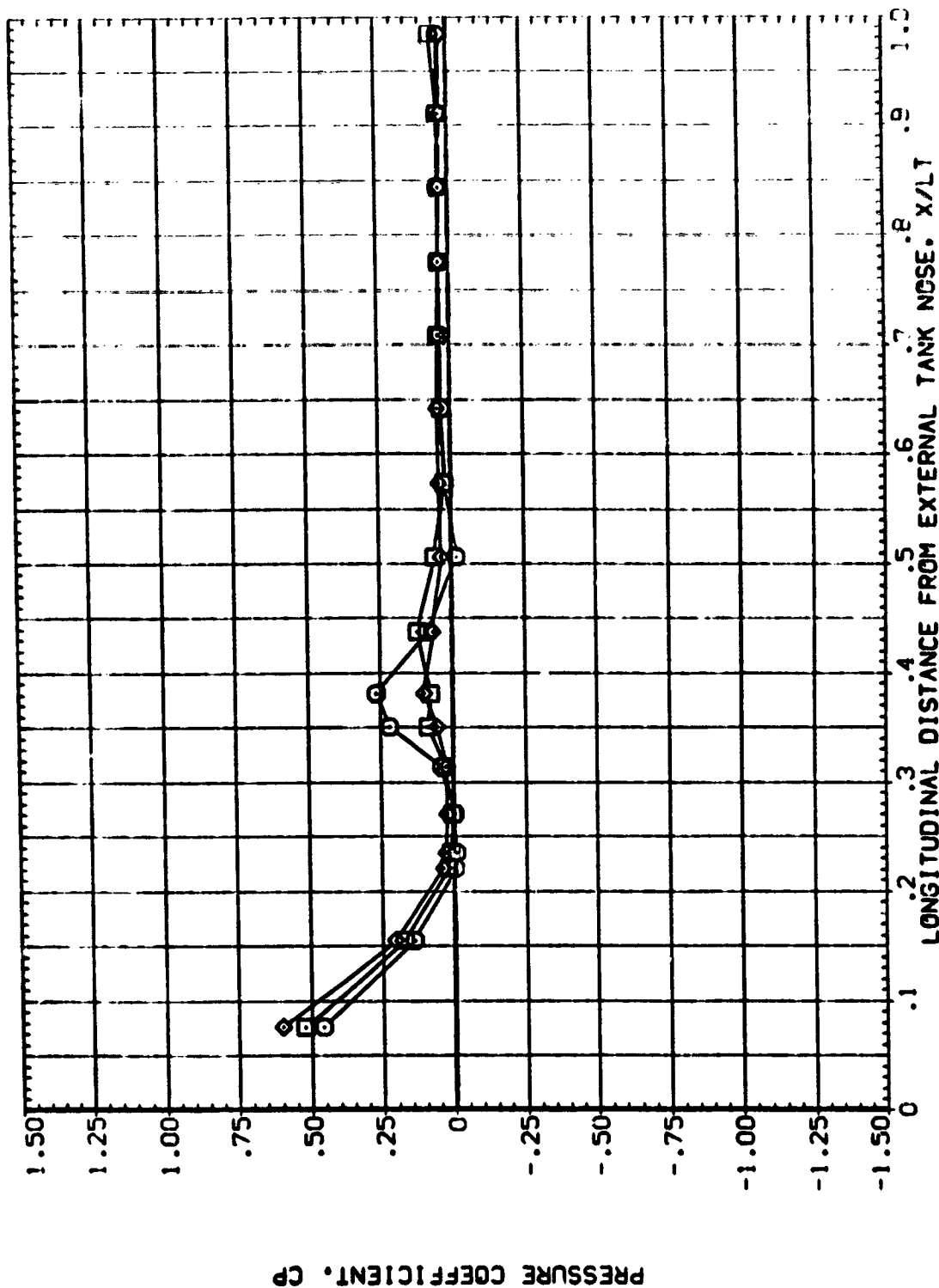
SYMBOL	PARAMETRIC VALUES		REFERENCE DATA		PARAMETRIC VALUES	
	PHI	ALPHA	MACH	SREF	BETA	CONF IG
◇	54.000	8.000	3.500	6.193	DELTA Z	90.000
□	72.000			5.313	X-SUB	0.000
◇	90.000			5.313		0.000
				2.549		0.000
				.000		0.000
				.000		0.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (AB2010)

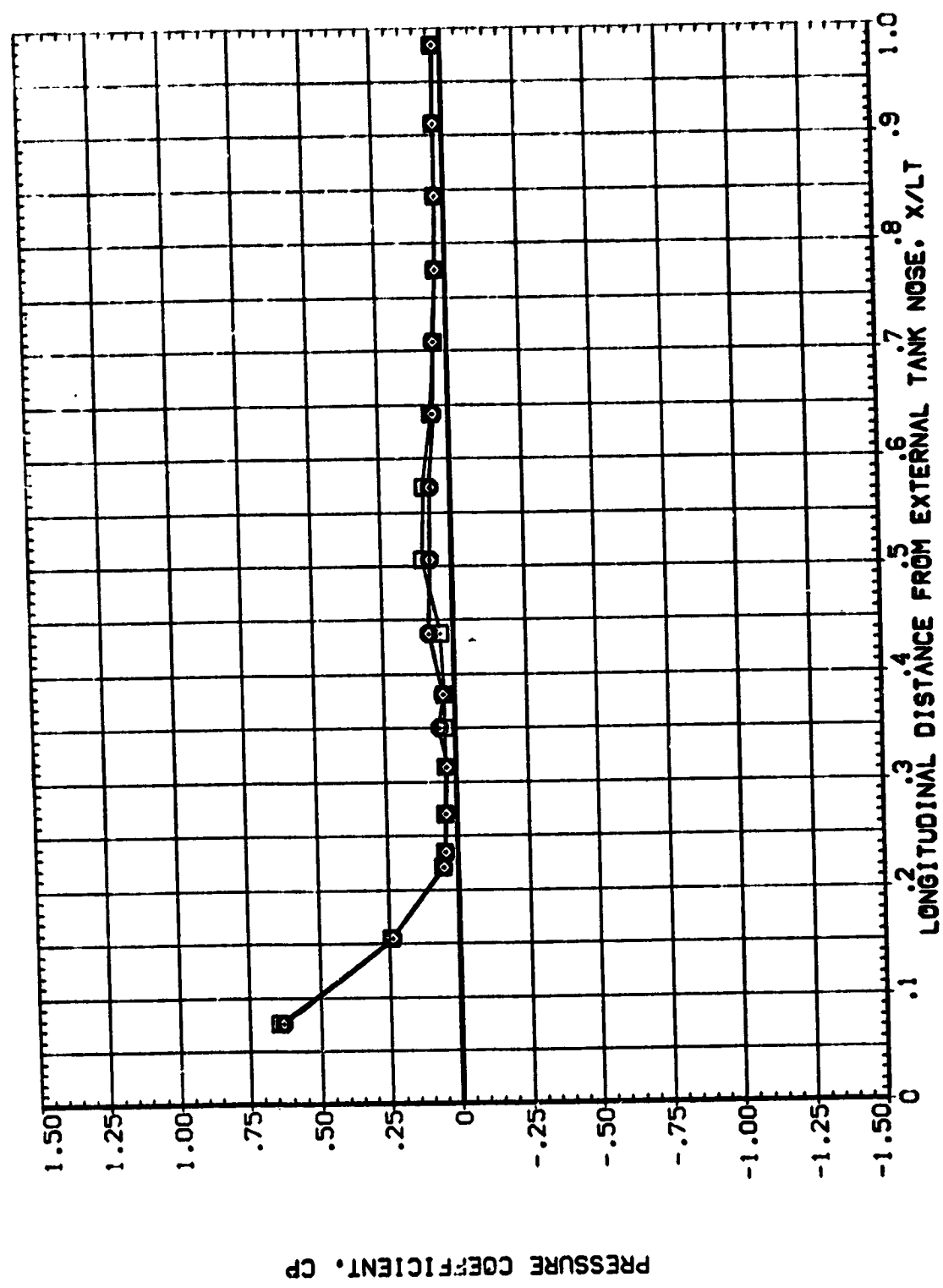
SYMBOL		PHI		ALPHA		MACH		REFERENCE DATA		BETA		PARAMETRIC VALUES	
◇	108.000	126.000	144.000	8.000	3.500	SREF	6.198	50. IN.	.000	.000	.000	.000	.000
◇		126.000	144.000	8.000	3.500	LREF	5.313	.000	.000	.000	.000	.000	.000
◇		126.000	144.000	8.000	3.500	BREF	5.313	.000	.000	.000	.000	.000	.000
◇		126.000	144.000	8.000	3.500	YREF	2.549	.000	.000	.000	.000	.000	.000
◇		126.000	144.000	8.000	3.500	ZREF	.000	.000	.000	.000	.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	XMRP	ZMRP	BETA	CONFIS	CONFIS	CONFIS
□	162.000	8.000	3.500	6.198	5.313	2.549	.000	DELTAZ	.000	.000	.000
◇	180.000			5.313				X-SRB	.000	.000	.000
◇	198.000			2.549					.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
○ □ ◇

PHI 270.000  
288.000  
306.000

ALPHA 8.000

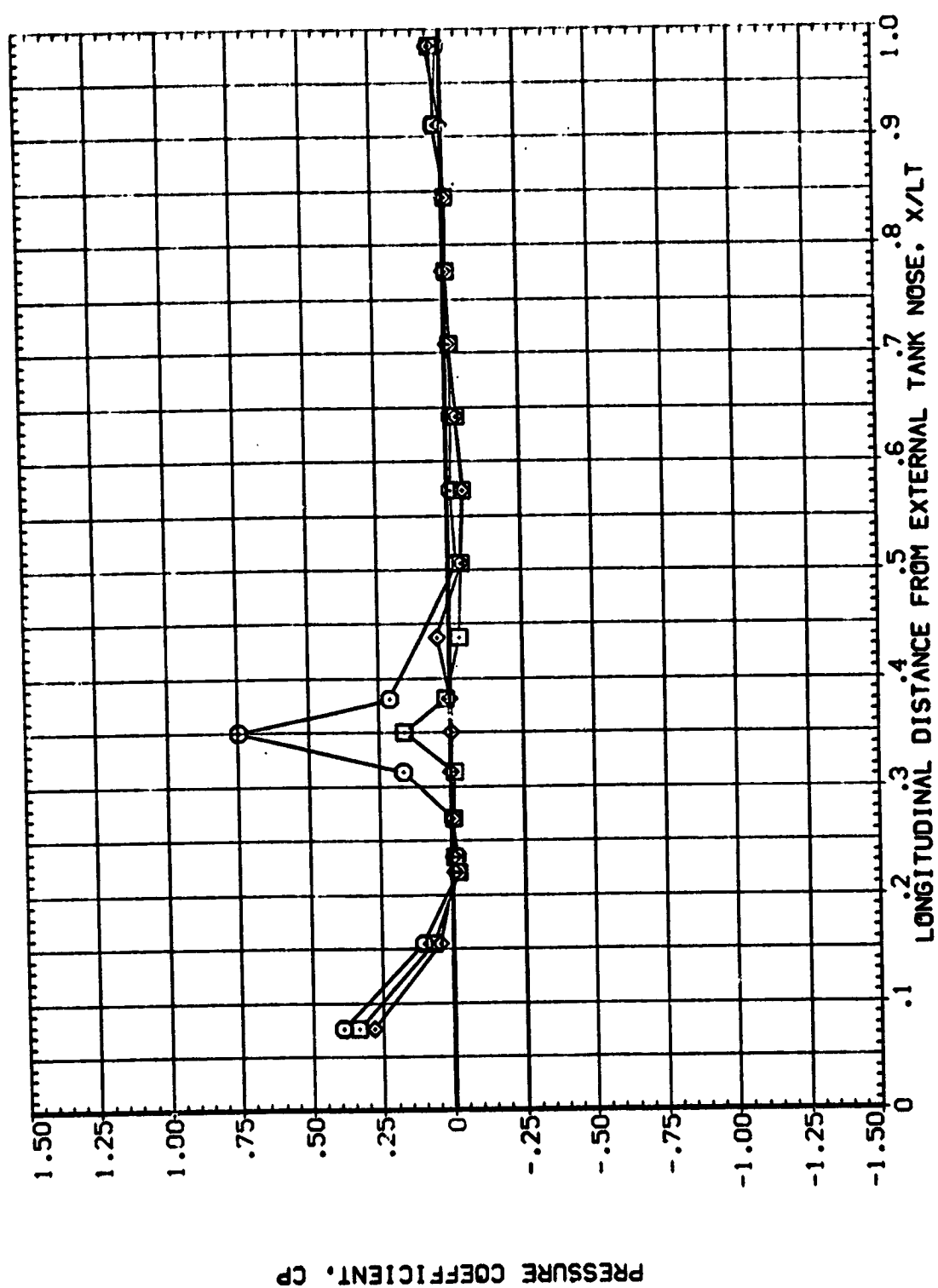
MACH 3.500

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
YMRP 2.549  
ZMRP .000

50. IN.  
IN.  
IN.

BETA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
.000 .000 .000  
.140 .140 .140  
.000 .000 .000  
90.000 90.000 90.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
 ○  
 □  
 ◇

PHI 324.000  
 342.000  
 360.000

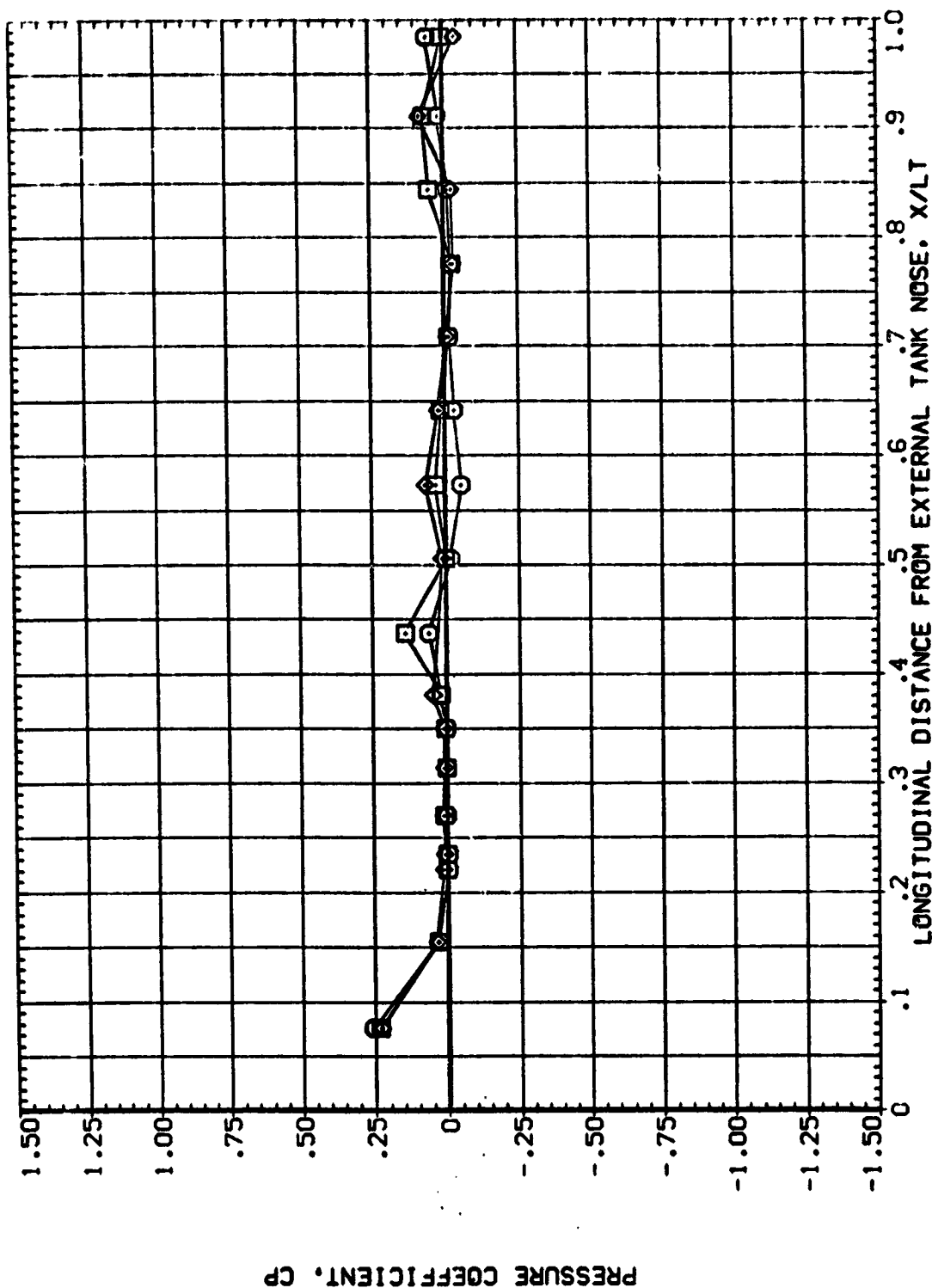
ALPHA 8.000  
 MACH 3.500

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA Z  
 X-SRB

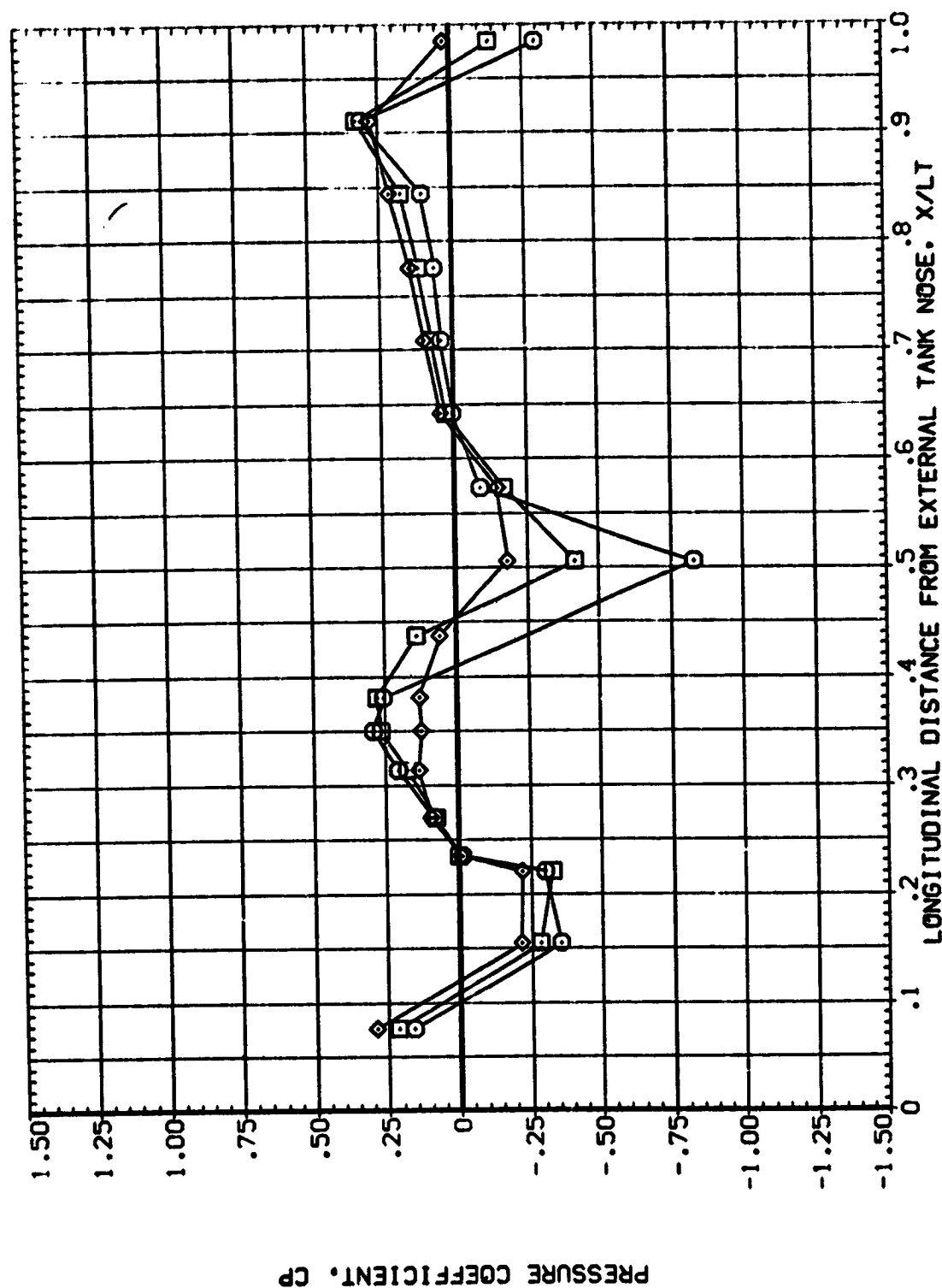
PARAMETRIC VALUES  
 .000  
 .140  
 .000  
 .000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

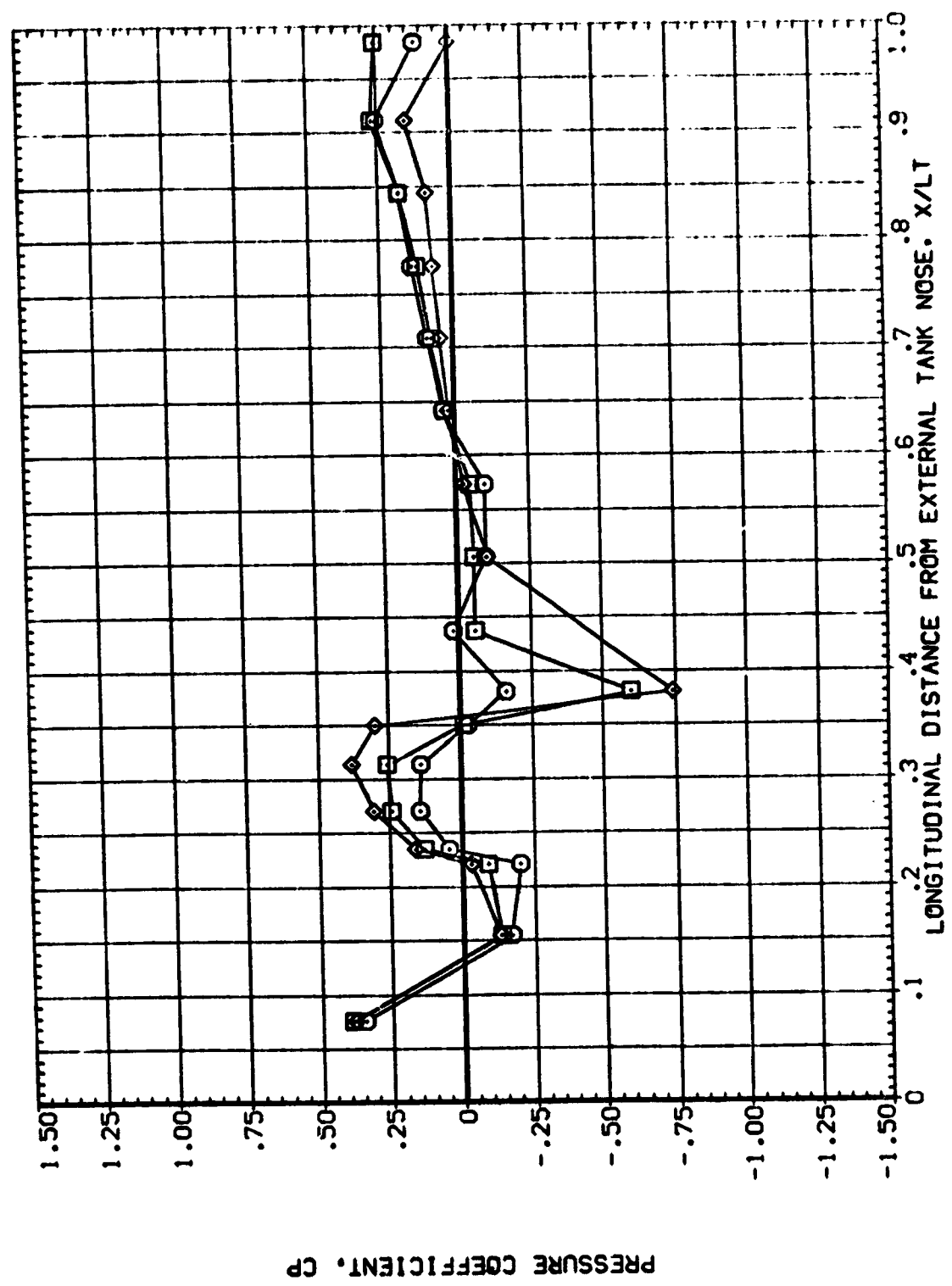
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	X-REF	CONF IG	CONF IG	CONF IG	CONF IG
○	.000	-8.000	.900	6.198	5.313	5.313	2.549	.000	.140	.000	.000
□	18.000							.000	.000	.000	.000
◇	36.000							.000	.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK, T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONFIS	SO. COC
□	54.000	-8.000	.500	5.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	72.000							IN.	X-SRB	.140	.500
◇	90.000							IN.		.000	.500
								IN.		.000	.500
								IN.		.000	.500

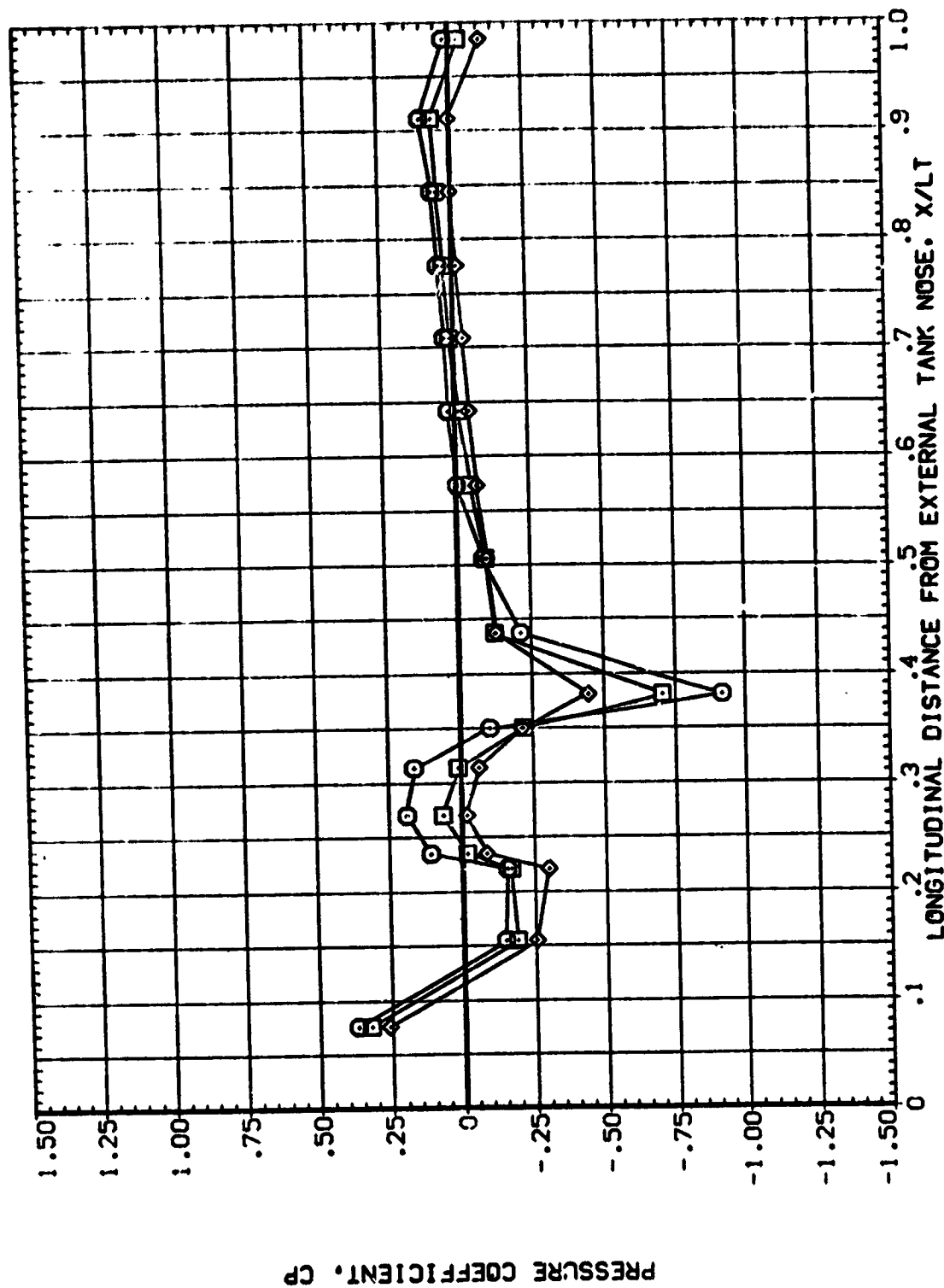


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

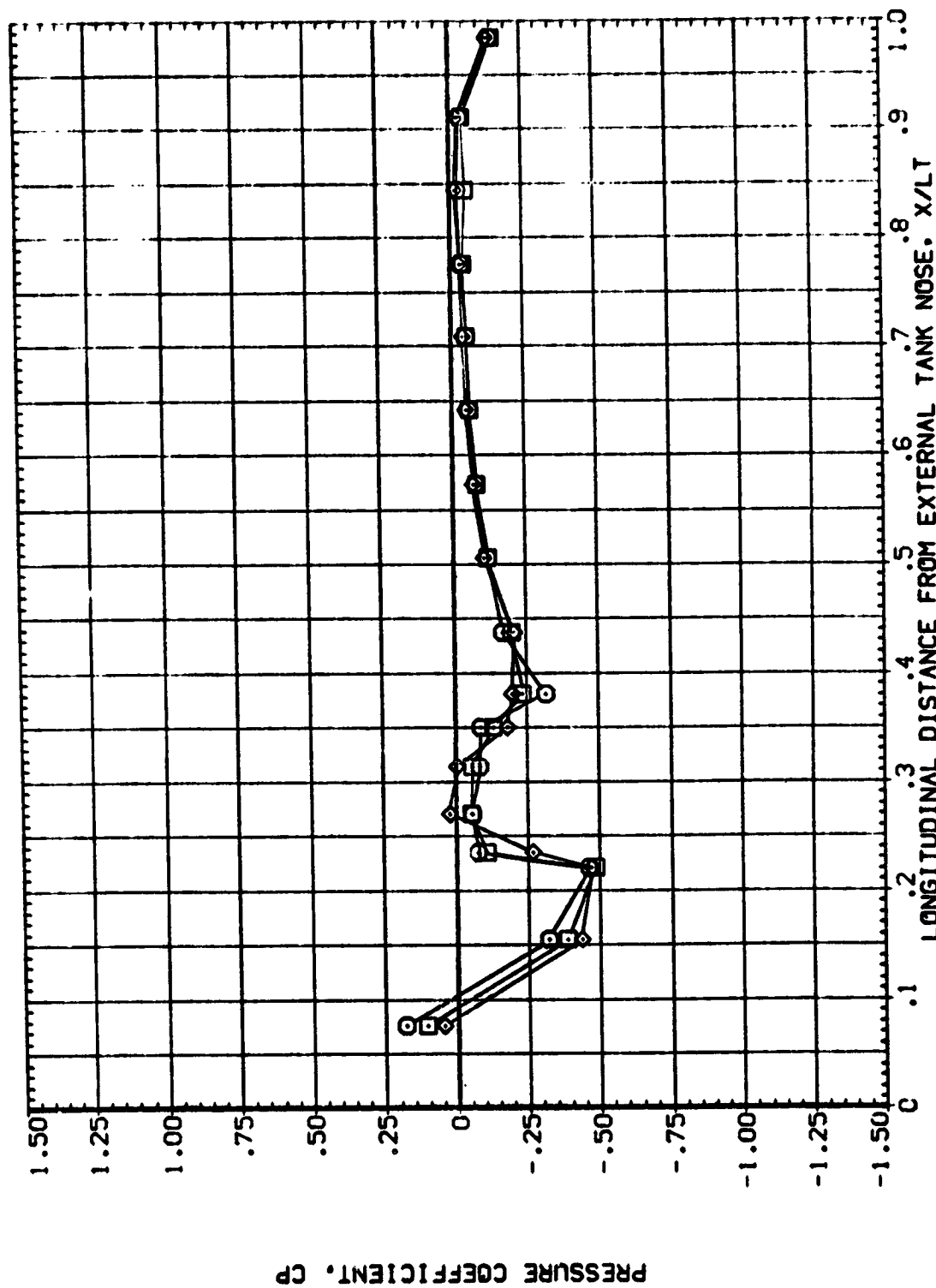
SYMBOL	REFERENCE DATA		PARAMETRIC VALUES	
	PHI	BETA	ALPHA	CONV IS
□	108.000	-8.000	DELTA Z	.000
◇	126.000	.900	X-SRS	.140
	144.000			.000
				.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 557(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

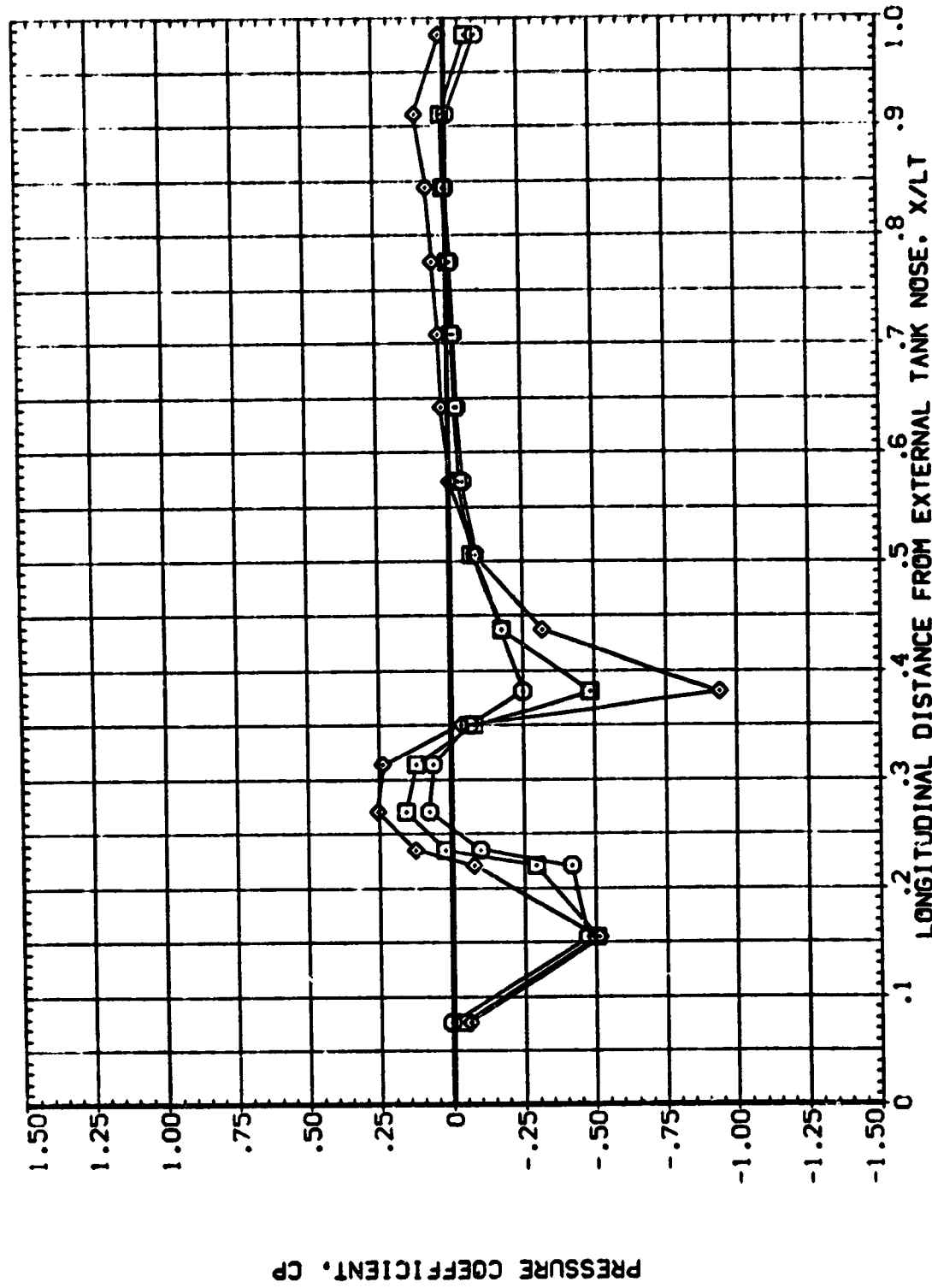
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SD.IN.	ALPHA	CONFUS	90.000
□	162.000	-8.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	180.000			5.313	5.313	5.313	2.549	IN.	X-SRB	.000	.000
◇	198.000			5.313	5.313	5.313	2.549	IN.	X-SRB	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

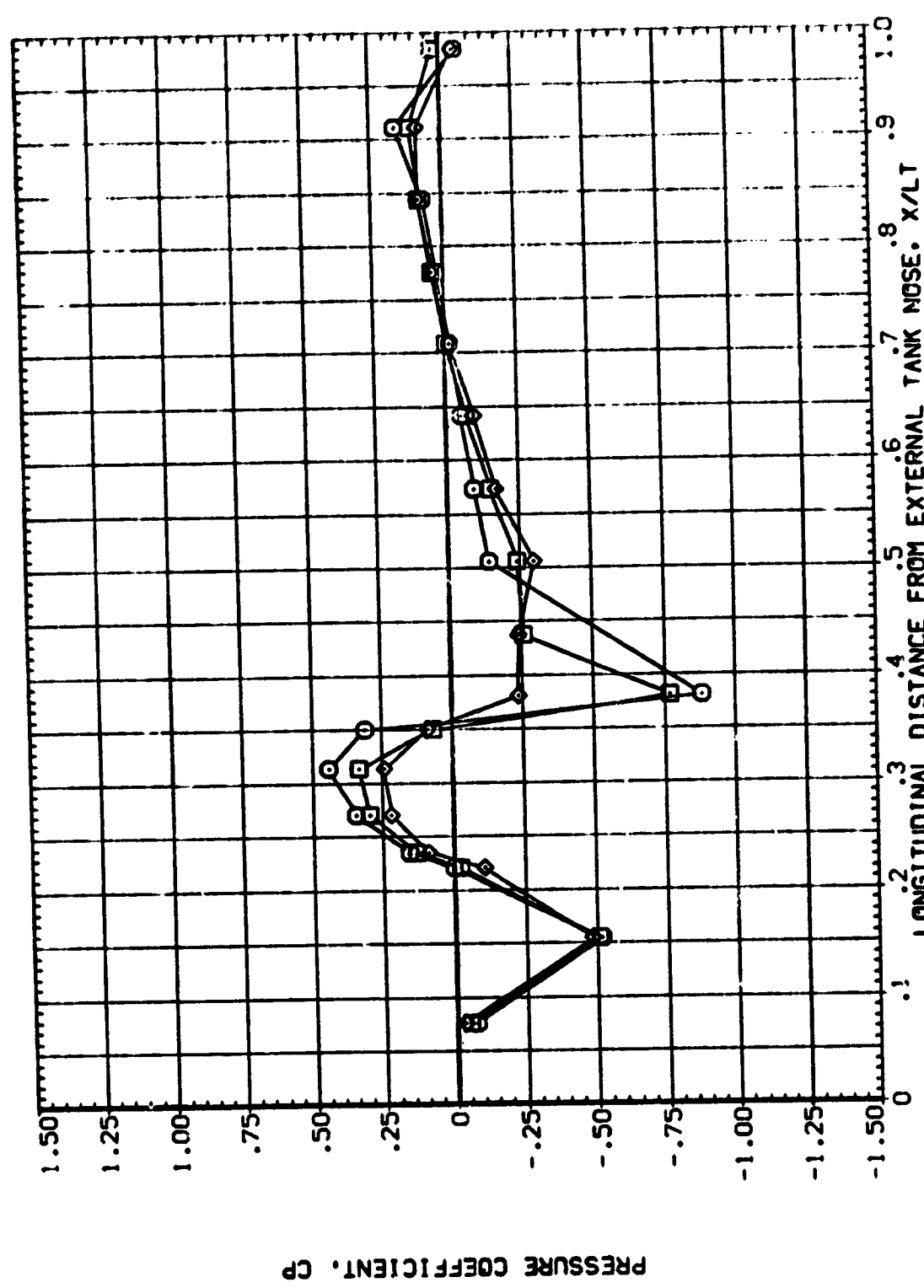
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	ALPHA	CONFIS	90.000
□	216.000	-8.000	.900	5.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
◇	234.000							IN.	X-SRH	OSBINE	.000
◇	252.000							IN.			.000
								IN.			.000
								IN.			.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
PM1	270.000	-8.000				SREF	6.198	SO. IN.		CONFUS	90.000
	288.000					LREF	5.313	IN.	DELTAZ	CONFUS	90.000
	306.000					BREF	5.313	IN.	Y-S93	CONFUS	90.000
						AMRD	2.549	IN.		CONFUS	90.000
						VMRD	.000	IN.		CONFUS	90.000
						VMRD	.000	IN.		CONFUS	90.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

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PHI  
324.000  
342.000  
360.000

BETA  
-8.000

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MACH

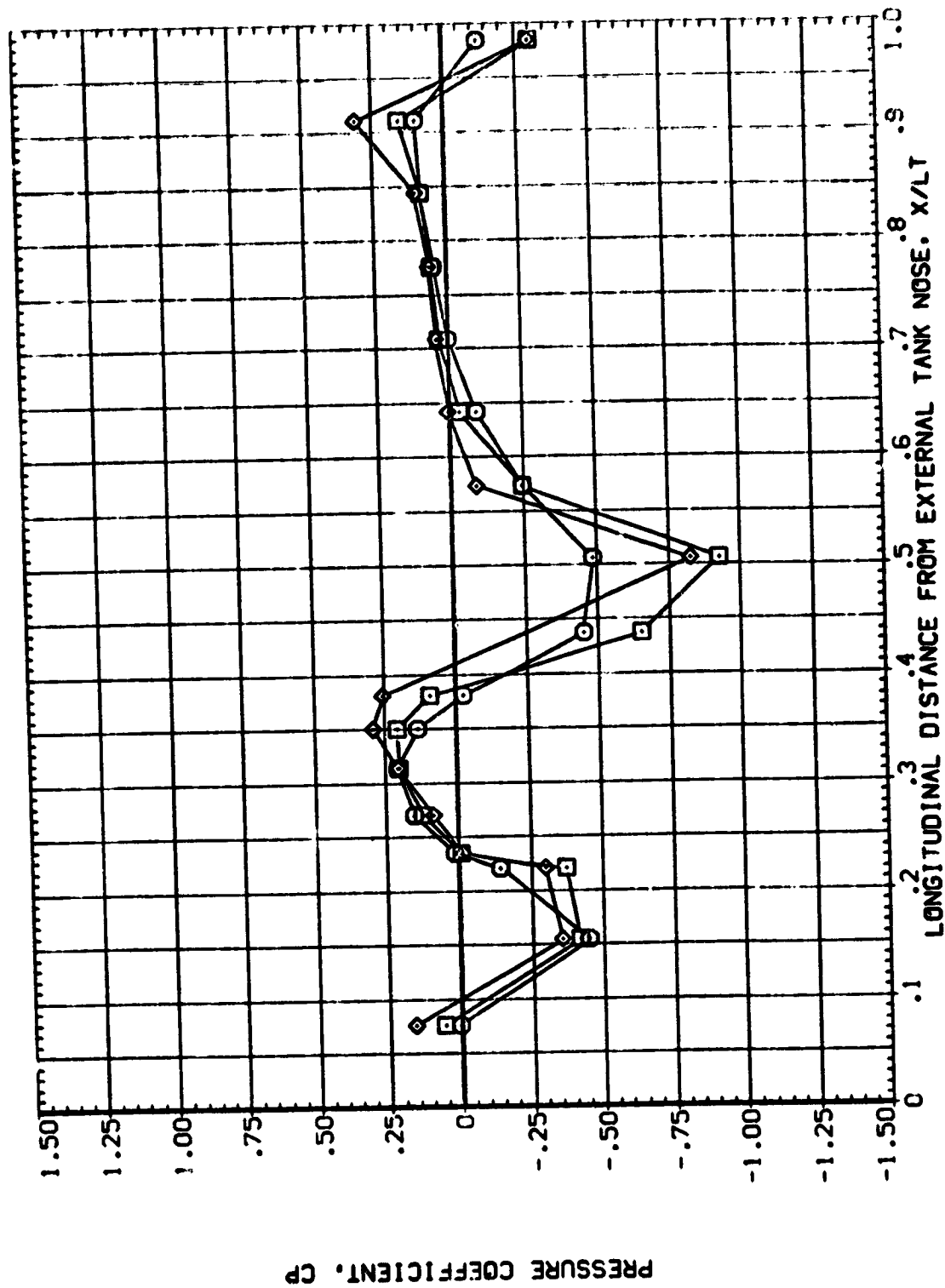
REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

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PARAMETRIC VALUES

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PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
◇  
□  
○

PMI .000  
18.000  
36.000

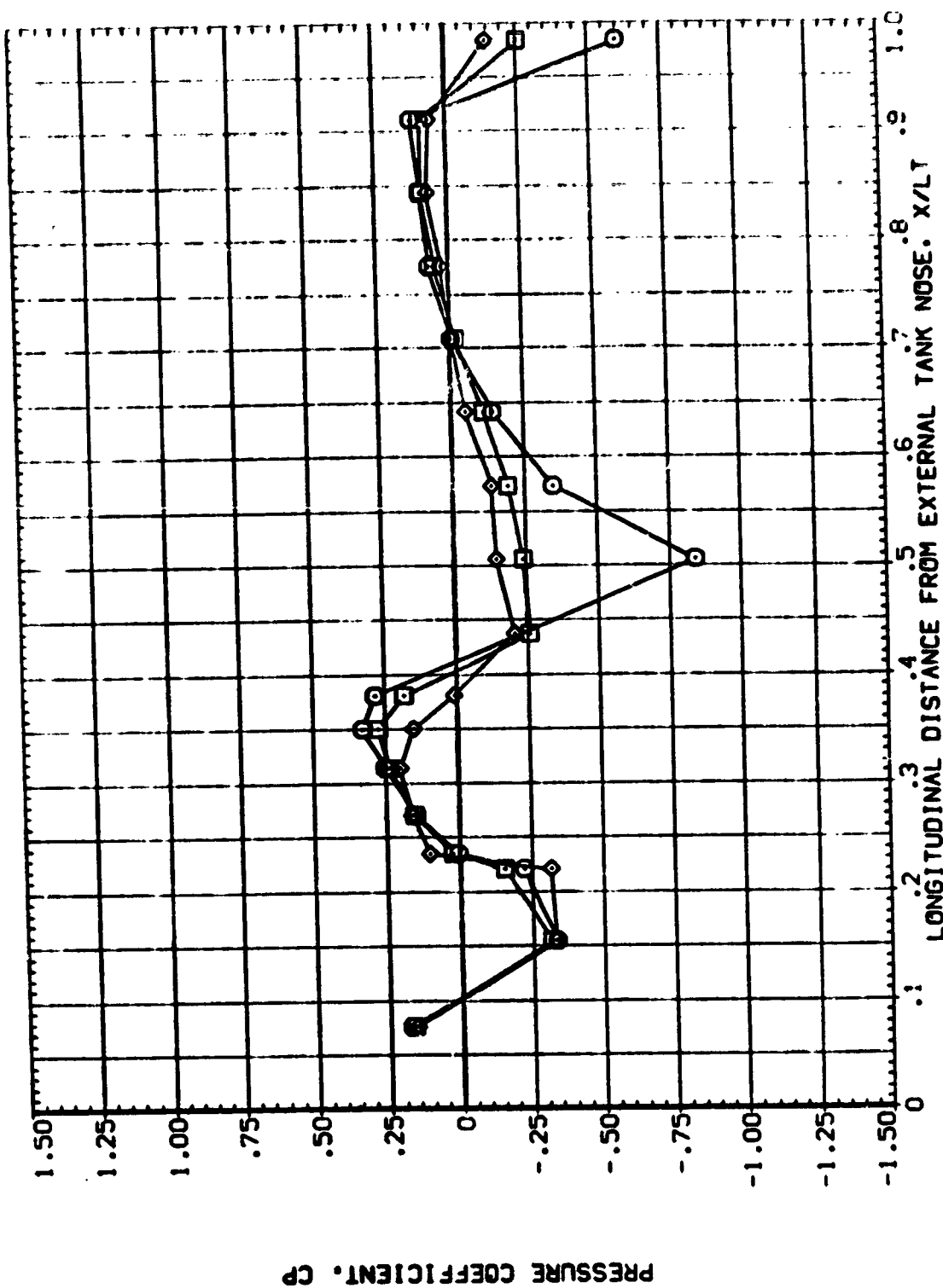
BETA .000  
MACH .900

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XREF 2.549  
YREF .000  
ZREF .000

SO. IN.  
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ALPHA  
DELTA  
X-588

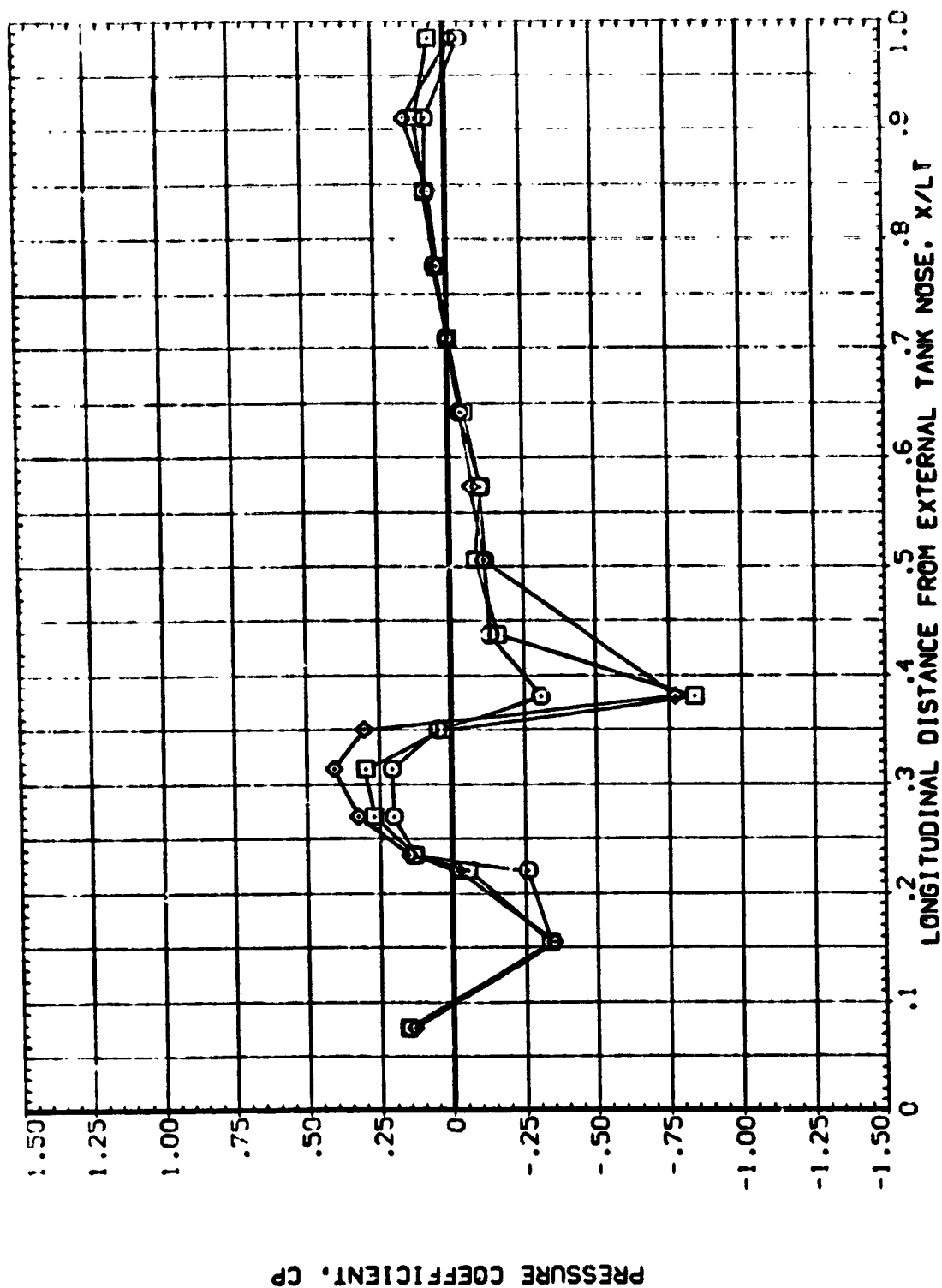
PARAMETRIC VALUES  
CONVTS 90.000  
RDCR .000  
RDCR 1.000  
RDCR 1.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) TO S3/2 S3/2 03 EXTERNAL TANK 1A82TC2

SYMBOL	PAI	BETA	MAC	REFERENCE DATA		PARAMETER VALUES			
				SREF	5.198	50. IN	ALPHA	1.000	30.000
◇	54.000	.000	.900	LREF	5.313	IN	DELTA	1.000	
□	72.000			BREF	5.313	IN	DELTA	1.000	
◇	90.000			XREF	5.345	IN	DELTA	1.000	
				YREF	5.345	IN	DELTA	1.000	
				ZREF	5.345	IN	DELTA	1.000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82) 02

SYMBOL

134.000  
136.000  
144.000

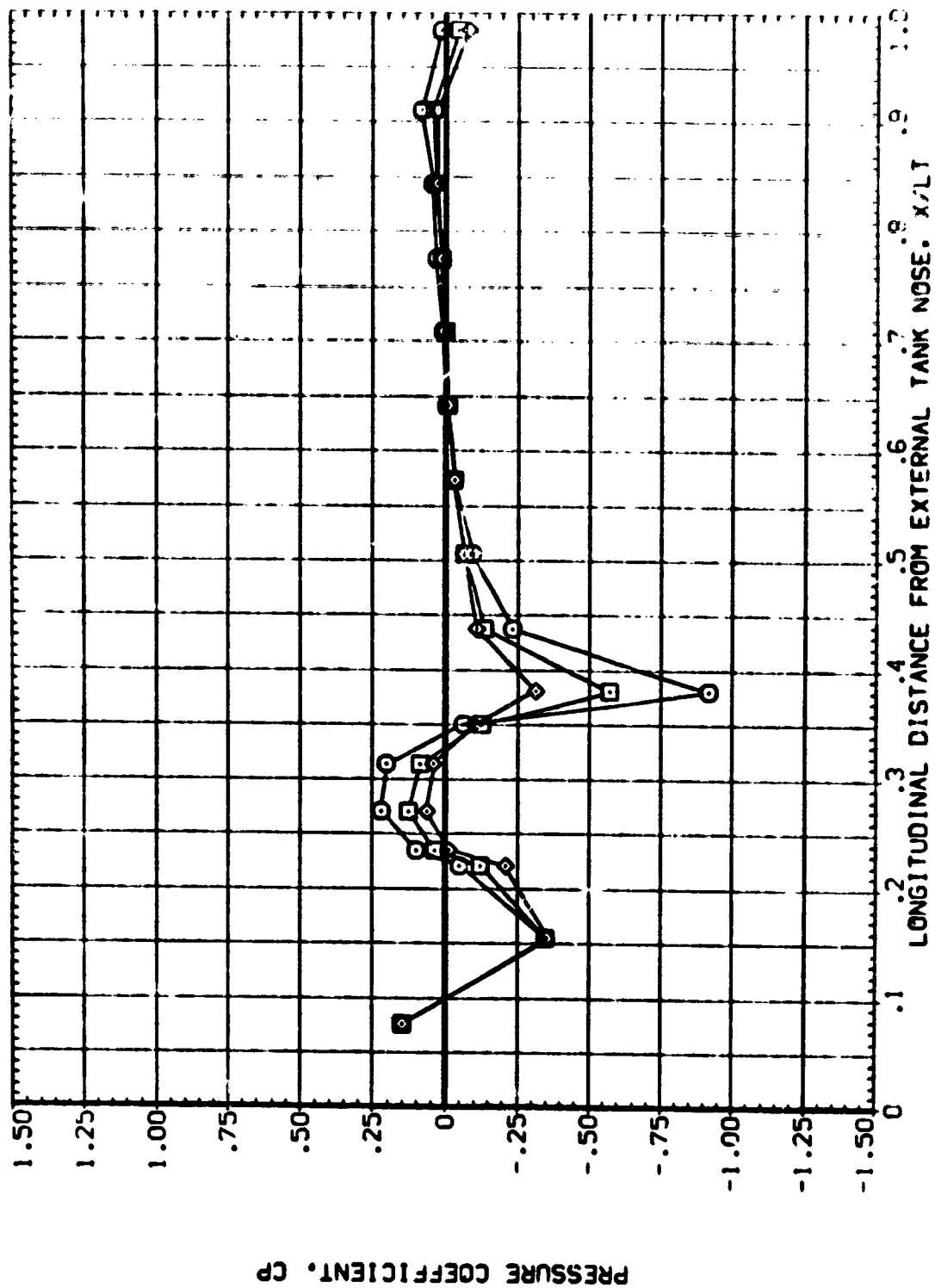
BETA .000

MACH .900

REFERENCE DATA

SRFC 6.199 50. IN.  
GLE 2.313 IN.  
RREF 2.313 IN.  
XREF 2.343 IN.  
YREF .000 IN.  
ZREF .000 IN.

NAME 19 1A32F  
20 1A32F  
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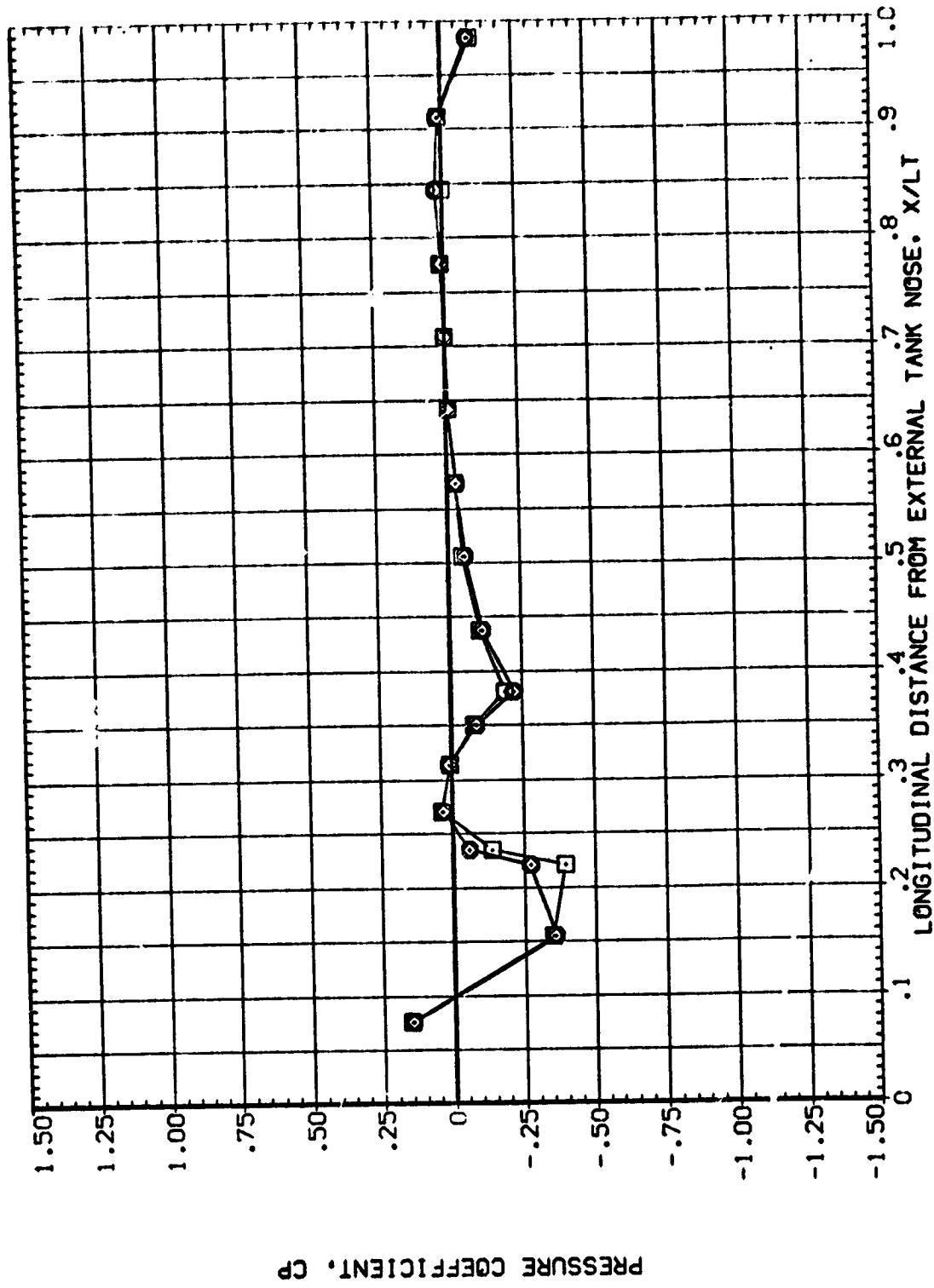
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82702)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	162.000	180.000			SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	DELTA Z	X-SRB
○	162.000	180.000	.000	.900	5.198	5.313	5.313	2.549	IN.	.000	.140	.000
◇	180.000	198.000	.000	.900	5.313	5.313	5.313	2.549	IN.	.000	.140	.000
◇	198.000	198.000	.000	.900	5.313	5.313	5.313	2.549	IN.	.000	.140	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

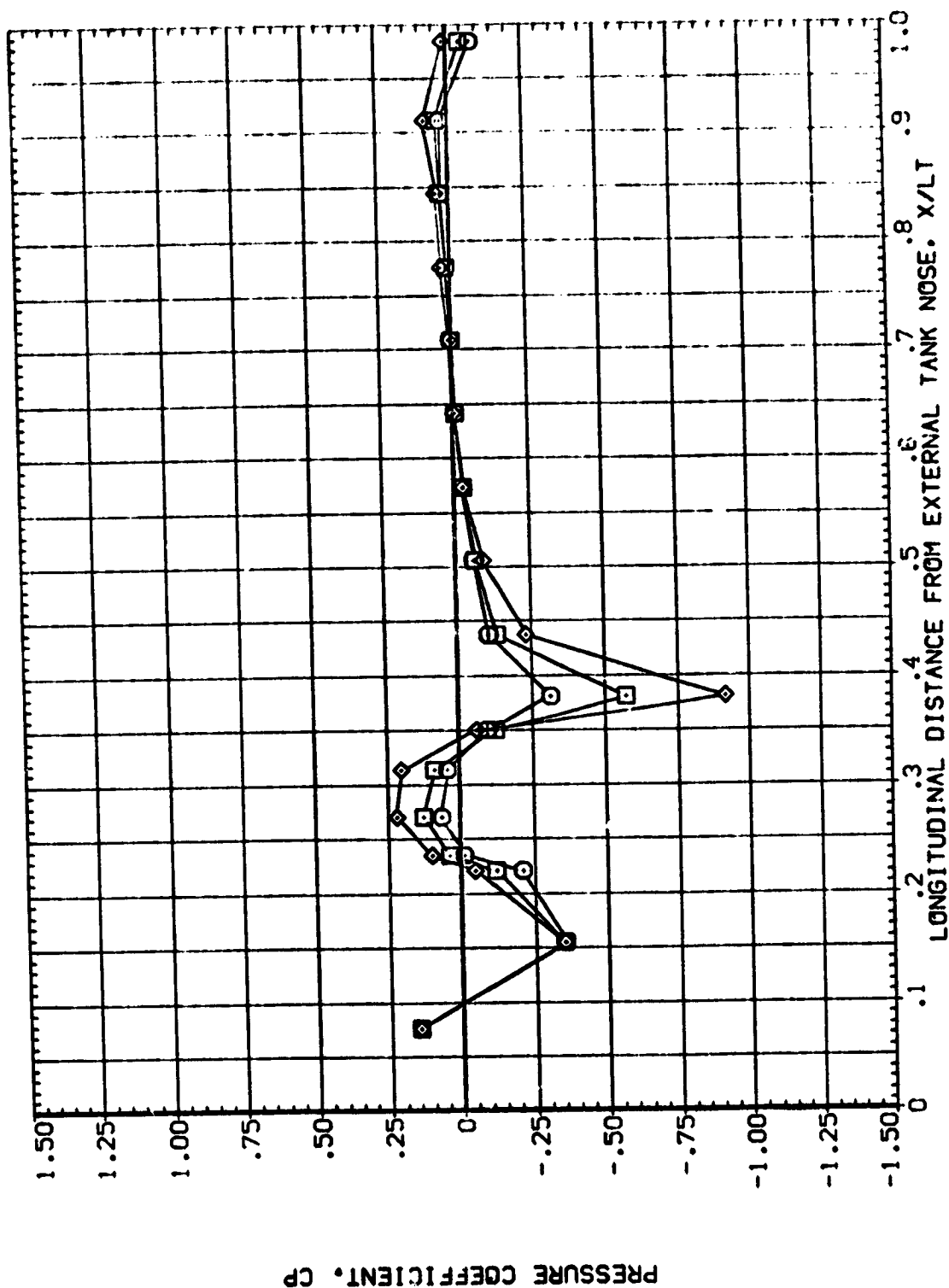
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL  
 216.000  
 234.000  
 252.000

BETA .000 MACH .900

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XMRP 2.549 IN.  
 YMRP .000 IN.  
 ZMRP .000 IN.

PARAMETRIC VALUES  
 .000 CONF 16  
 .140 R-ORDER  
 .000 C-9:NC  
 .000  
 .000  
 .500

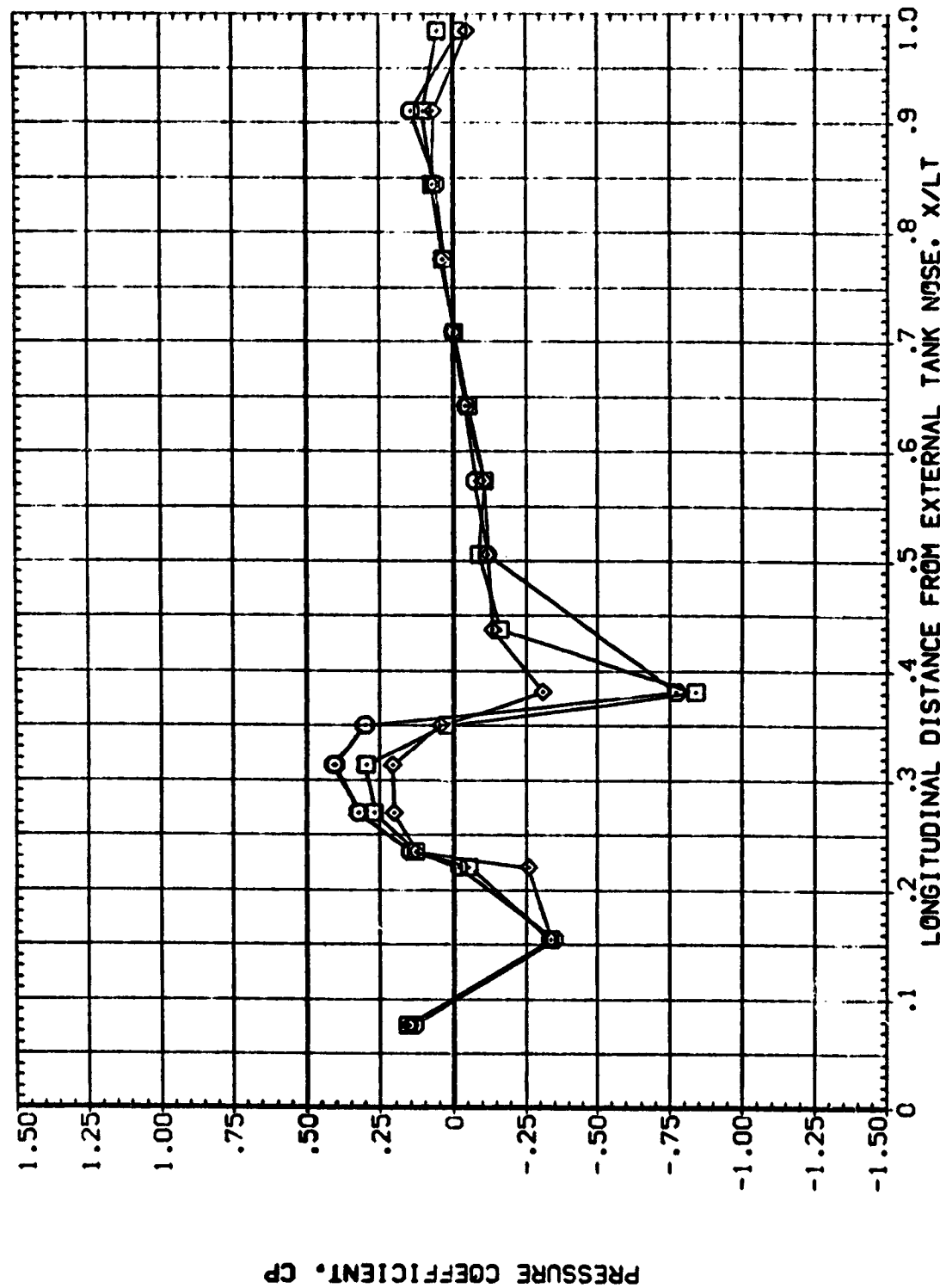


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A821C2)

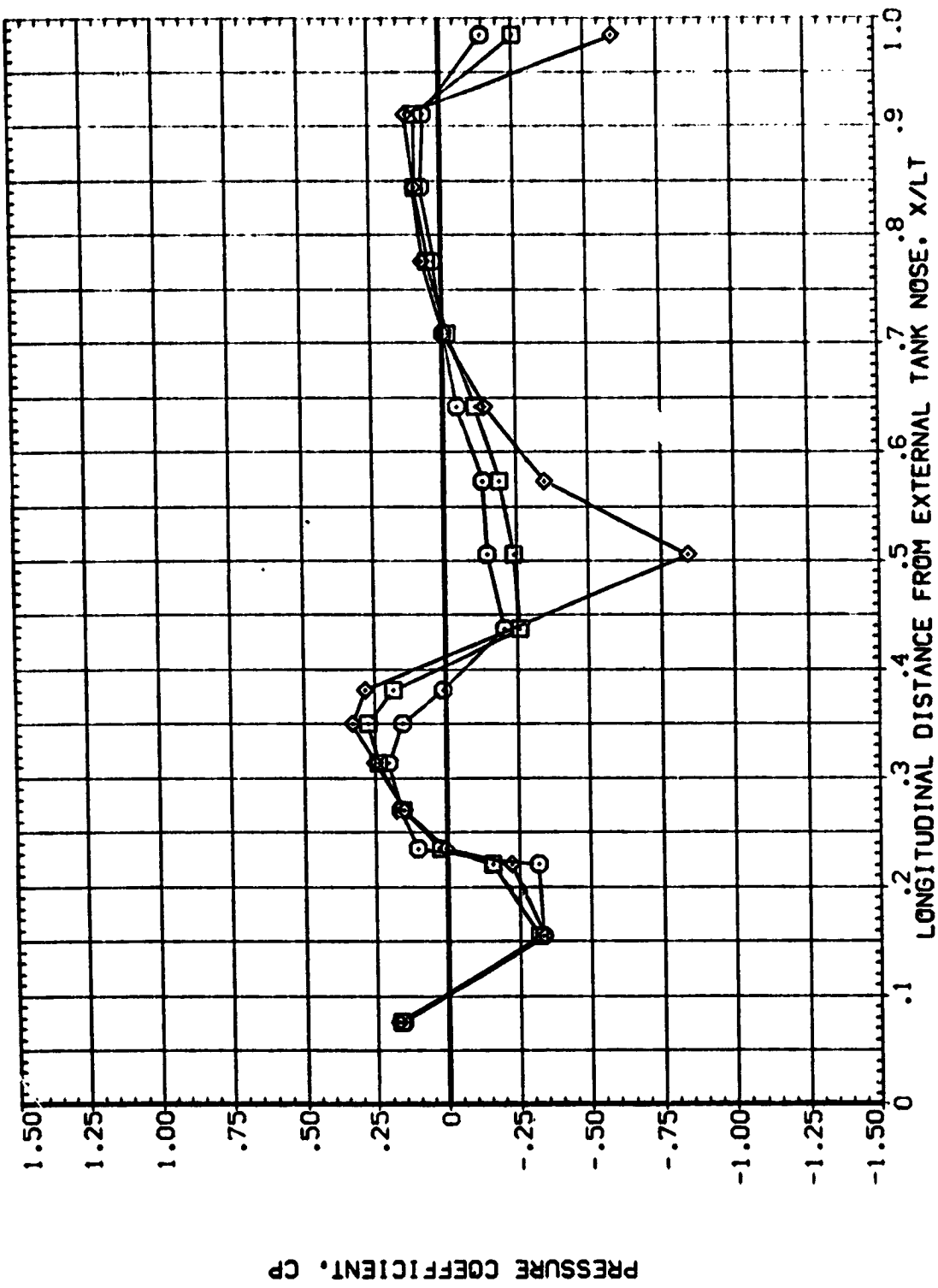
SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	270.000	.000	.900	SREF 6.198	.000 CONFIS 90.00
□	288.000	.000	.900	LREF 5.313	.000 RUDER .000
◇	306.000	.000	.900	BREF 5.313	.000 ORBINC .50
				XMRP 2.549	
				YMRP .000	
				ZMRP .000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	VMRP	SO. IN.	IN.	ALPHA	DELTAZ
◇	324.000	.000	.900	6.198	5.313	5.313	2.549	6.198	5.313	.000	.000
□	342.000	.000	.900	5.313	5.313	5.313	2.549	5.313	5.313	.140	.000
◇	360.000	.000	.900	5.313	5.313	5.313	2.549	5.313	5.313	.000	.000

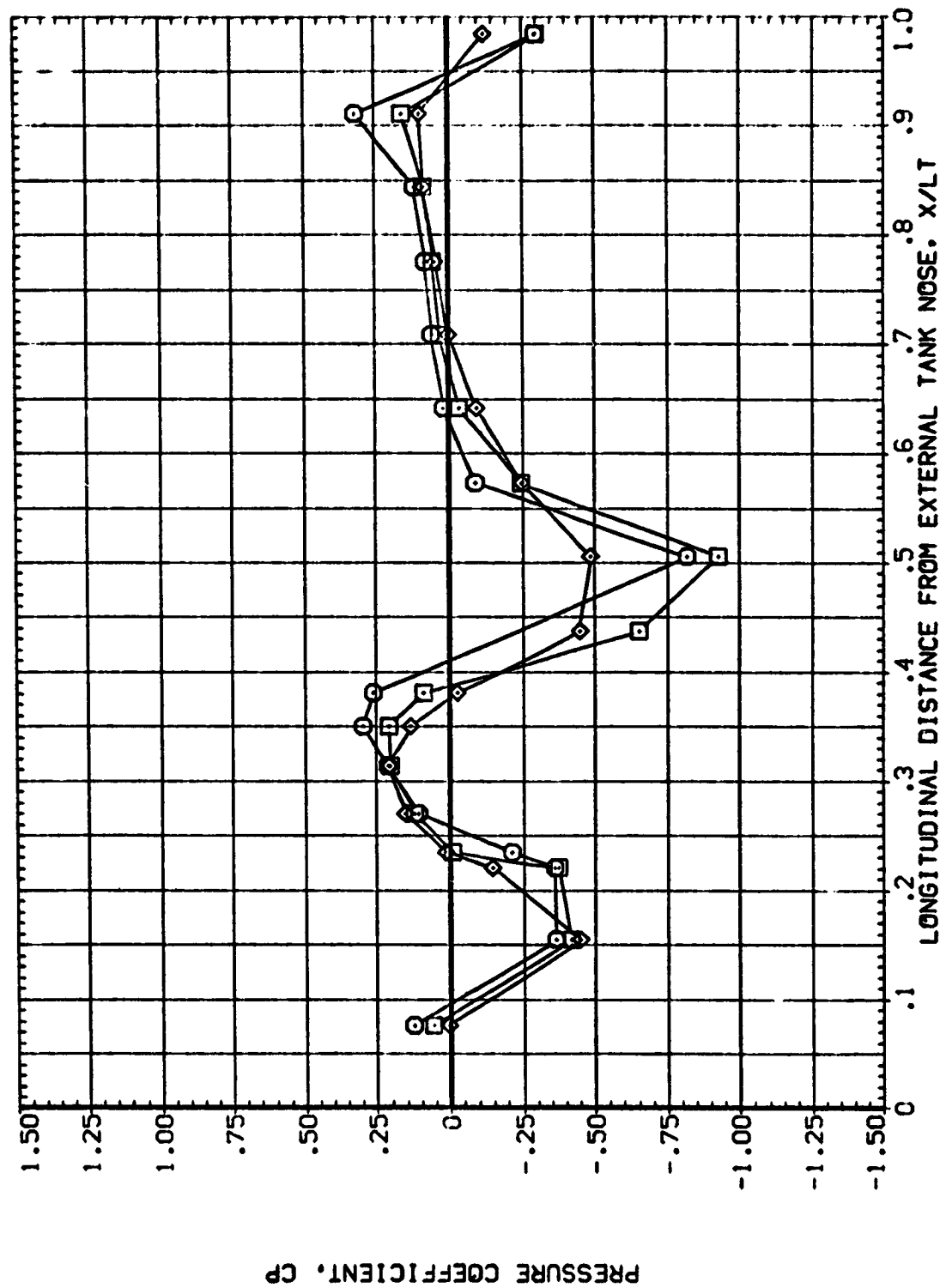


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	DELTA Z	X-SRB
○	.000	8.000	.900	6.198	5.313	5.313	2.549	IN.	1.00	1.40	RODIER
□	18.000							IN.	.000	.000	ORBING
◇	36.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL

54.000  
72.000  
90.000

BETA 8.000  
MACH .900

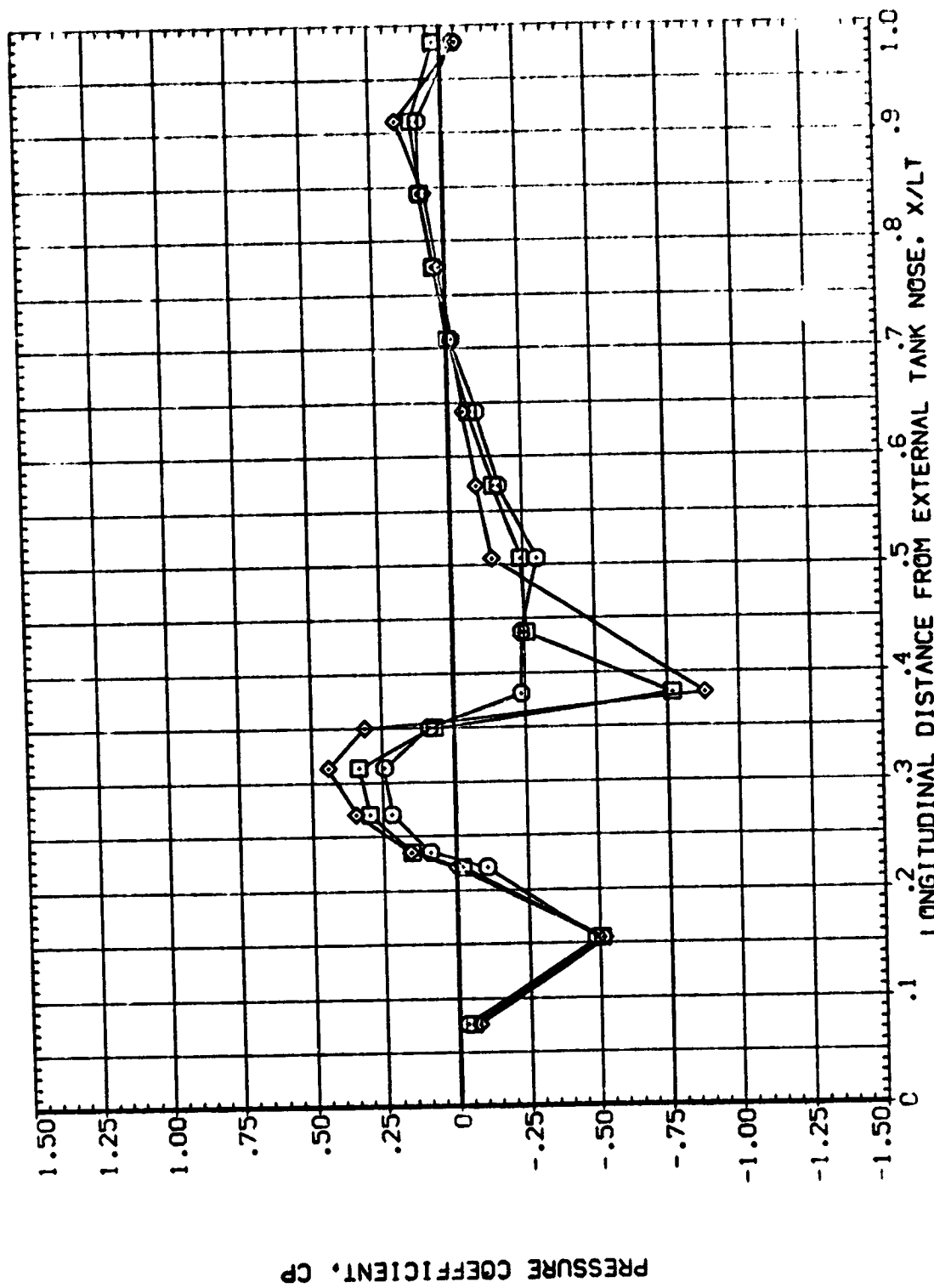
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SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000  
.140  
.000  
CONFIG  
ROTTER  
ORRINC

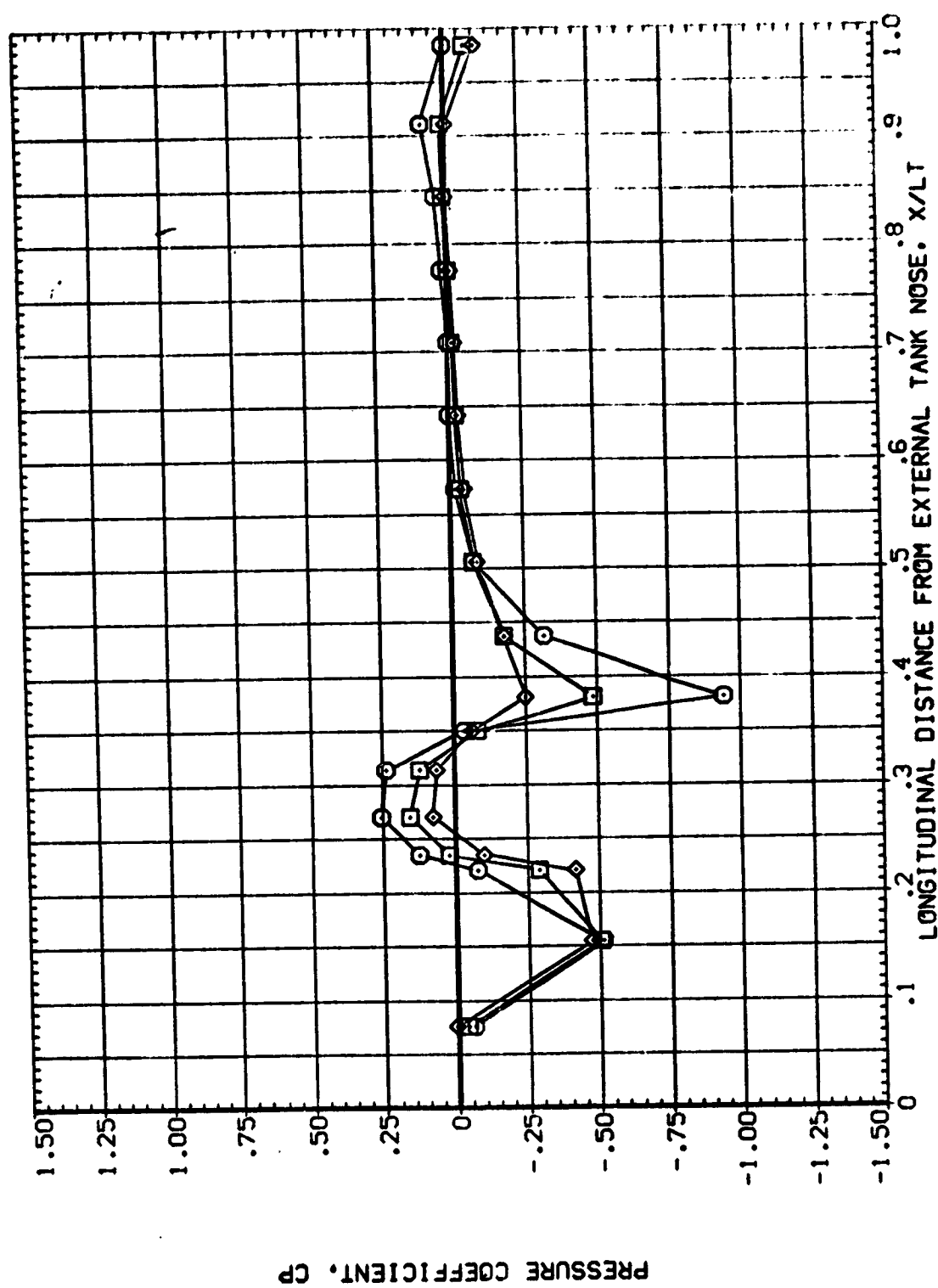
90.000  
90.000  
90.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

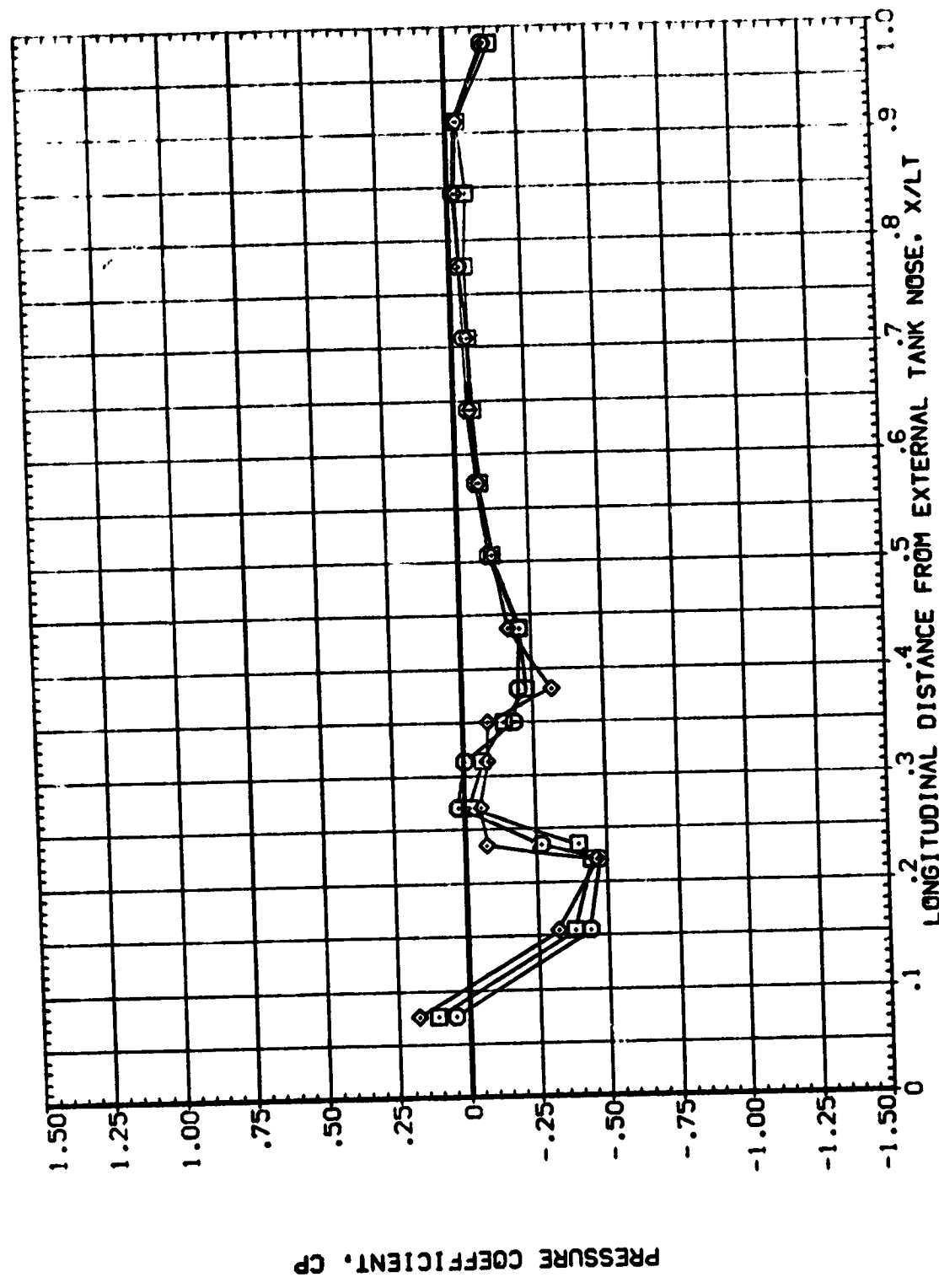
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		ALPHA	PARAMETRIC VALUES	
				SREF	SD. IN.		CONF IG	
○	108.000	8.000	.900	LREF	5.313 IN.	DELTA Z	.000	RUDDER
□	126.000			BREF	5.313 IN.	X-SRB	.000	ORBITAL
◇	144.000			YMRP	2.549 IN.			
				ZMRP	.000 IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF IG	90.000
○	162.000	8.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	180.000							IN.	X-SRB	.140	.000
◇	198.000							IN.		.000	.000
								IN.		.000	.000
								IN.		.000	.000

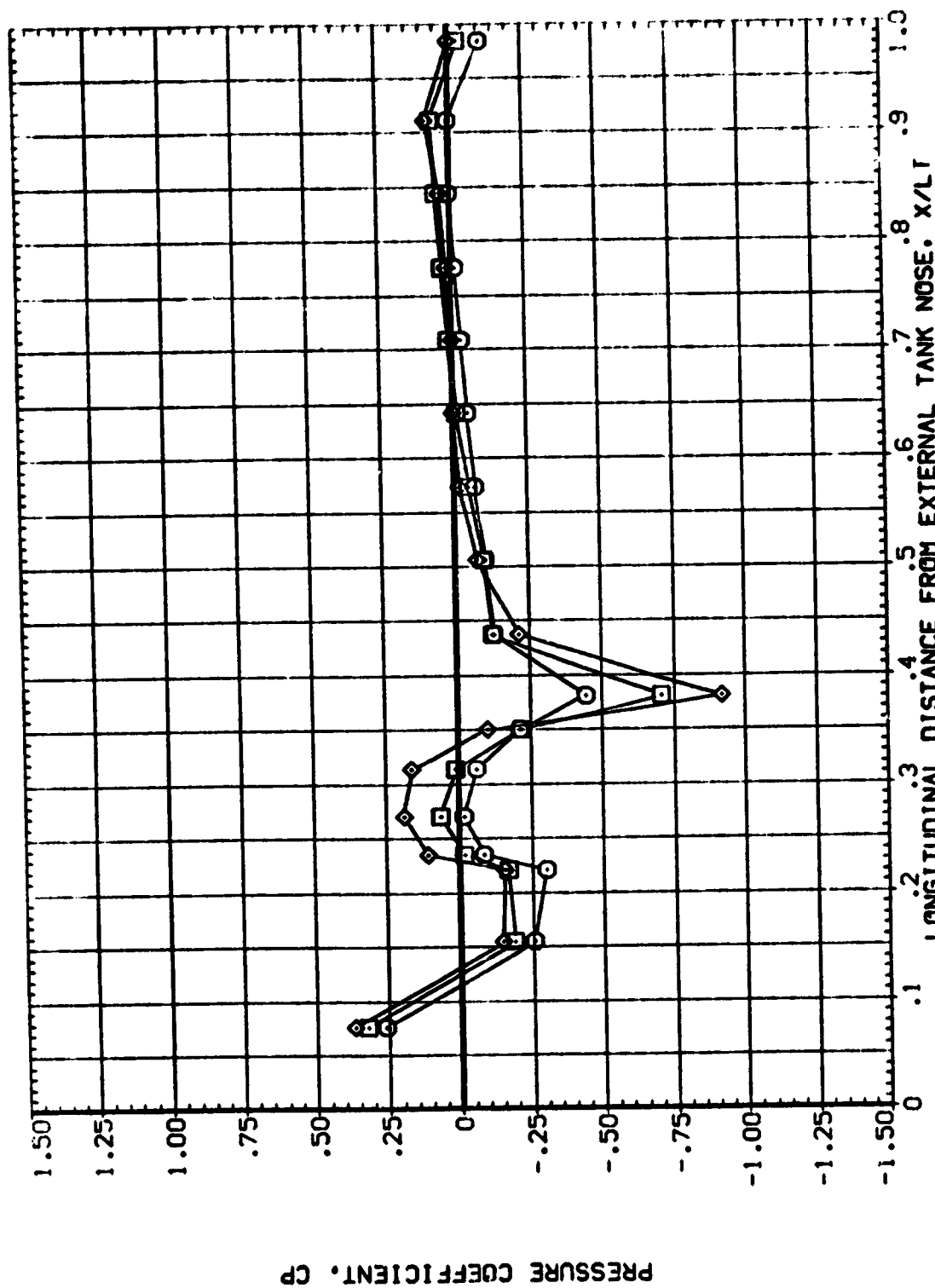


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

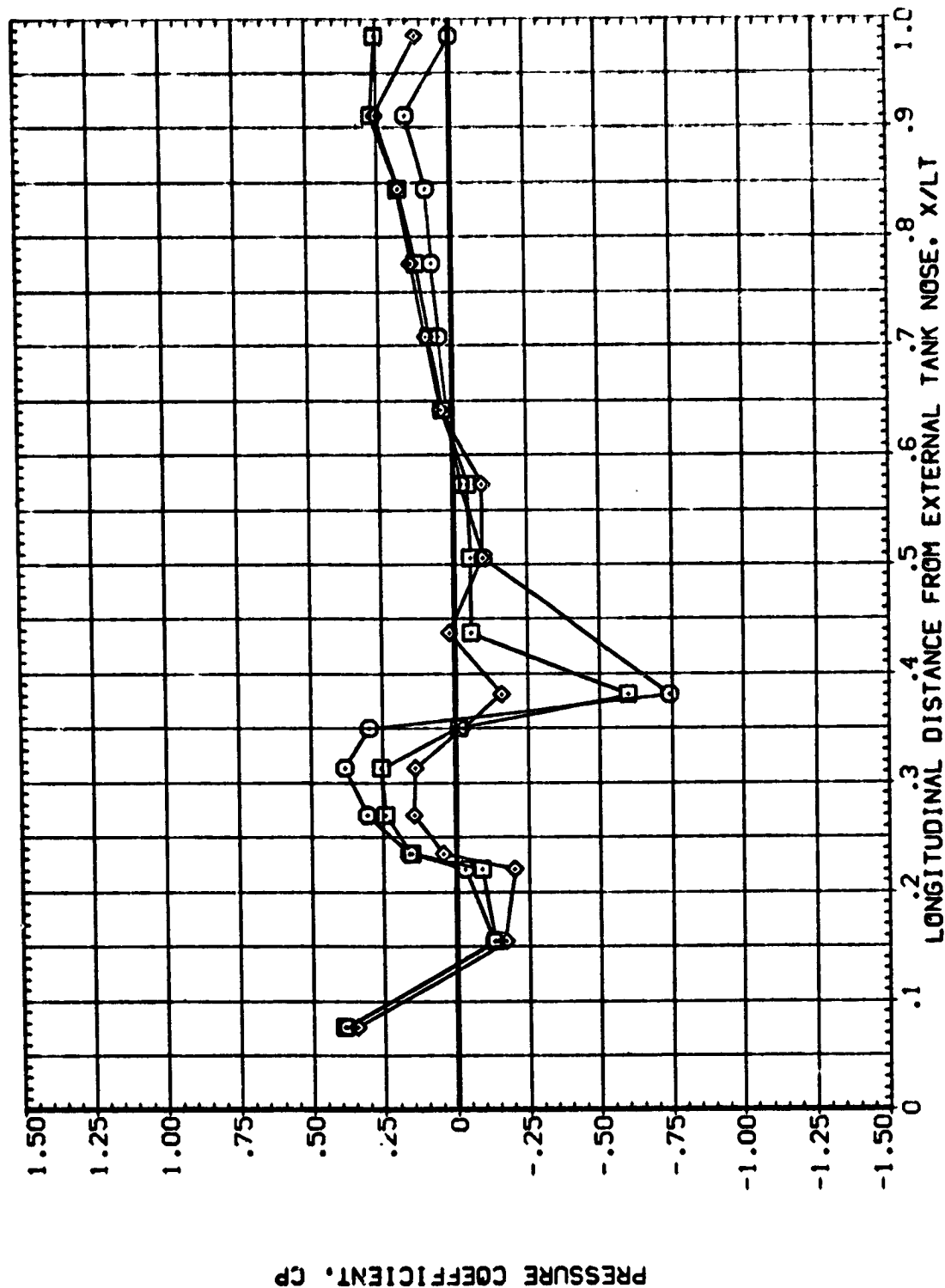
SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	216.000	8.000	.900	SREF 6.198	CONFIG 90.000
□	234.000			LREF 5.313	.100
◇	252.000			BREF 5.313	.140
				YMRP 2.549	RUDER .000
				ZMRP .000	958.140



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

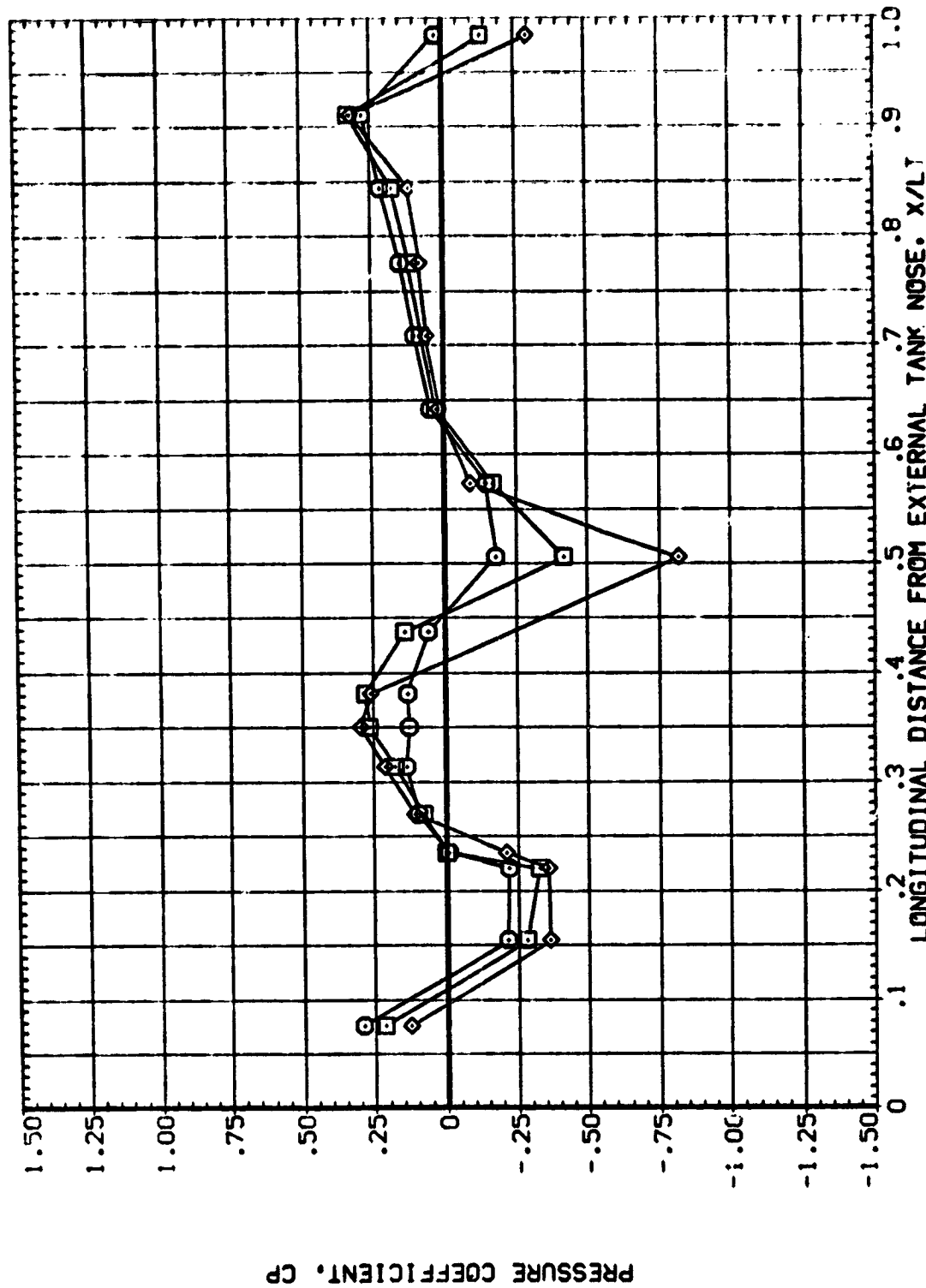
SYMBOL	PHI		BETA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	270.000	288.000	8.000	.900			SREF	6.198	50. IN.	CONFIG
○							LREF	5.313	IN.	.000
□							BREF	5.313	IN.	.140
◇							AMRP	2.549	IN.	.000
							ZMRP	.000	IN.	.000
										DELTA Z
										X-SRB
										DRG INC
										90.000
										.000
										.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

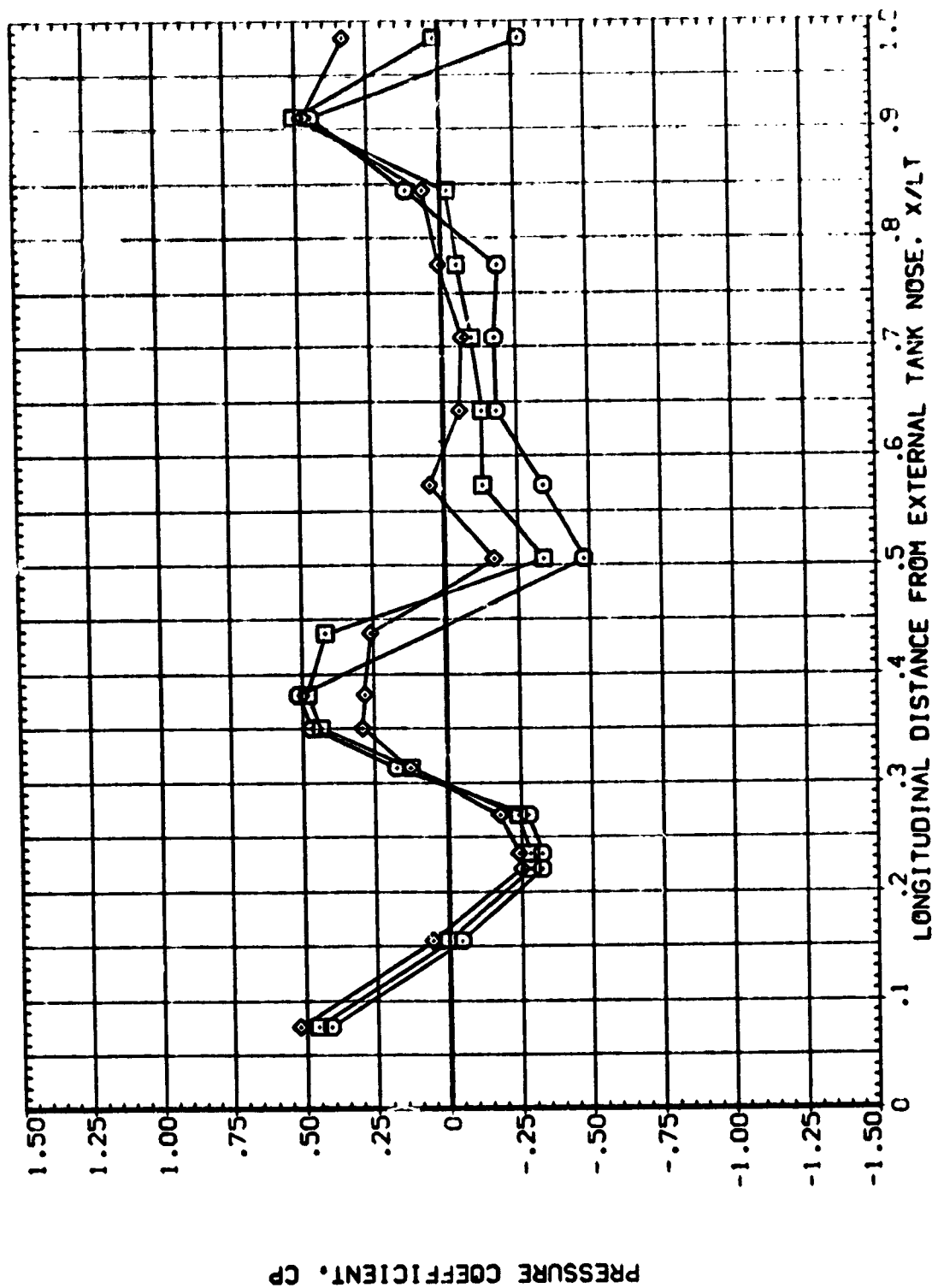
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	SO. IN.	ALPHA	CONFIG	90.000		
□	324.000	0.000	.500	LREF	5.313	IN.	DELTAZ	.000	R.000		
◇	342.000			BREF	5.313	IN.	Y-SRR	.140	.000		
	360.000			VMRP	2.549	IN.		.000	.500		
				ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A92T02)

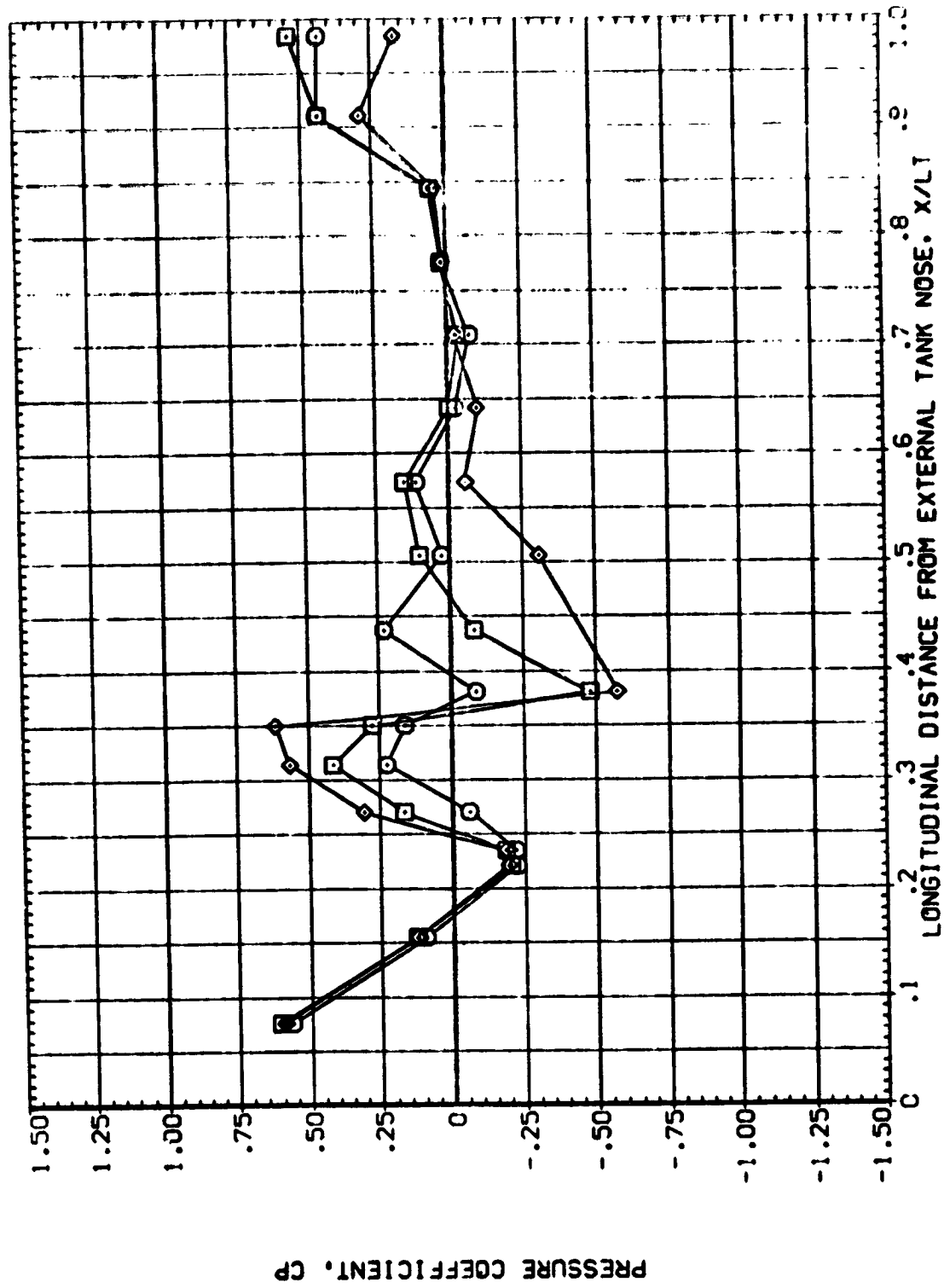
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
				SREF	SO. IN.	DELTA Z	DELTA Z	CONFIG	CONFIG
○	.000	-8.000	1.250	5.313	IN.	5.313	IN.	.140	R-100R
□	18.000			2.549	IN.	2.549	IN.	.001	R-100R
◇	36.000			.000	IN.	.000	IN.	.001	R-100R



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	ALPHA	CONV. IS
○	54.000	-8.000	1.250	5.313	IN.	DELTA Z	R-0009
□	72.000			5.313	IN.	X-SRS	NO. 10
◇	90.000			2.548	IN.		
				.000	IN.		
				.000	IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82100)

SYMBOL  
 ○  
 □  
 ◇

PHI 108.000  
 126.000  
 144.000

BETA -8.000

MACH 1.250

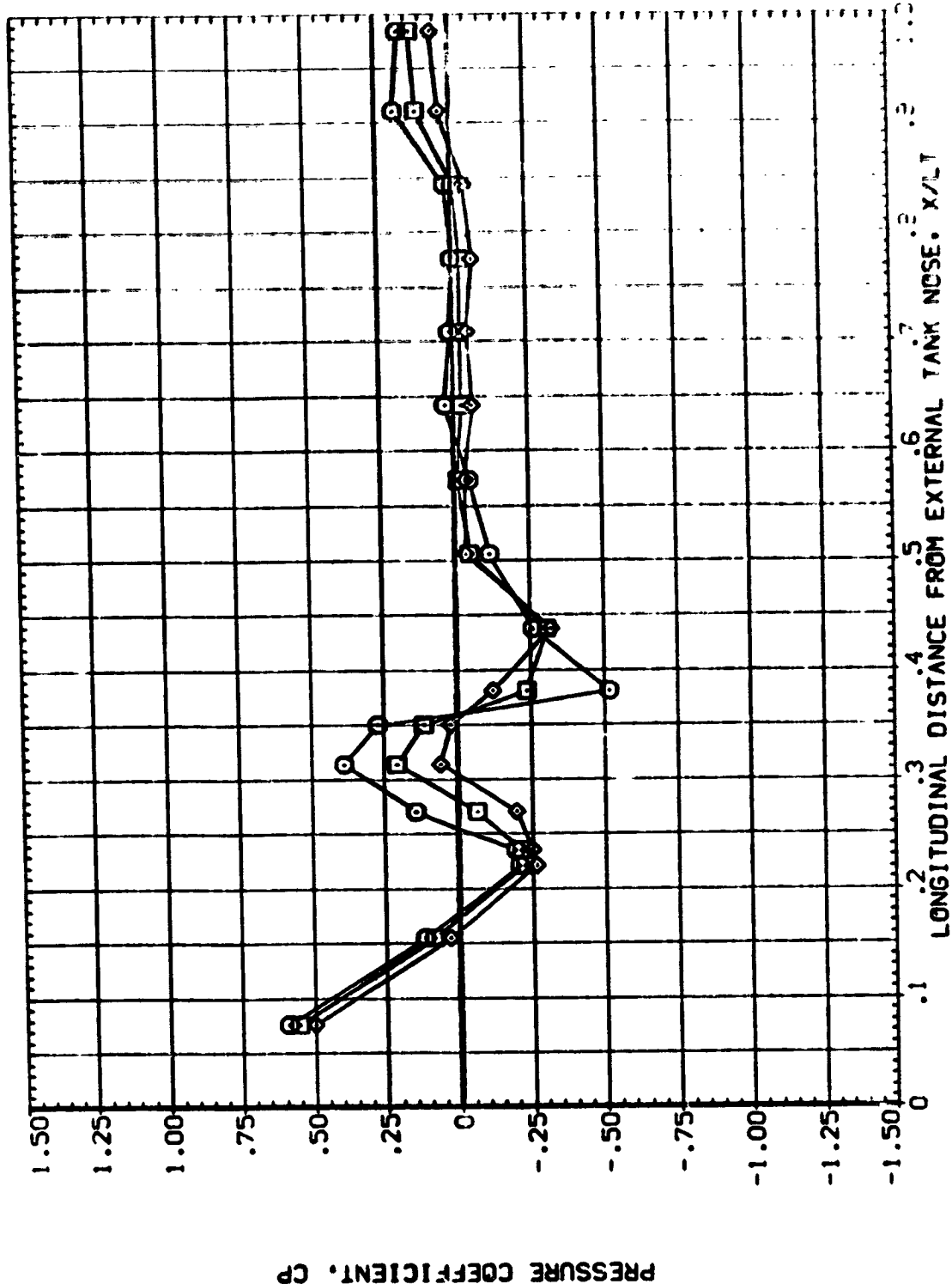
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 XREF 5.313  
 YREF 2.549  
 ZREF .070  
 .000

SG. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA  
 X-S99

PARAMETER VALUES  
 .000  
 .140  
 .000  
 .000

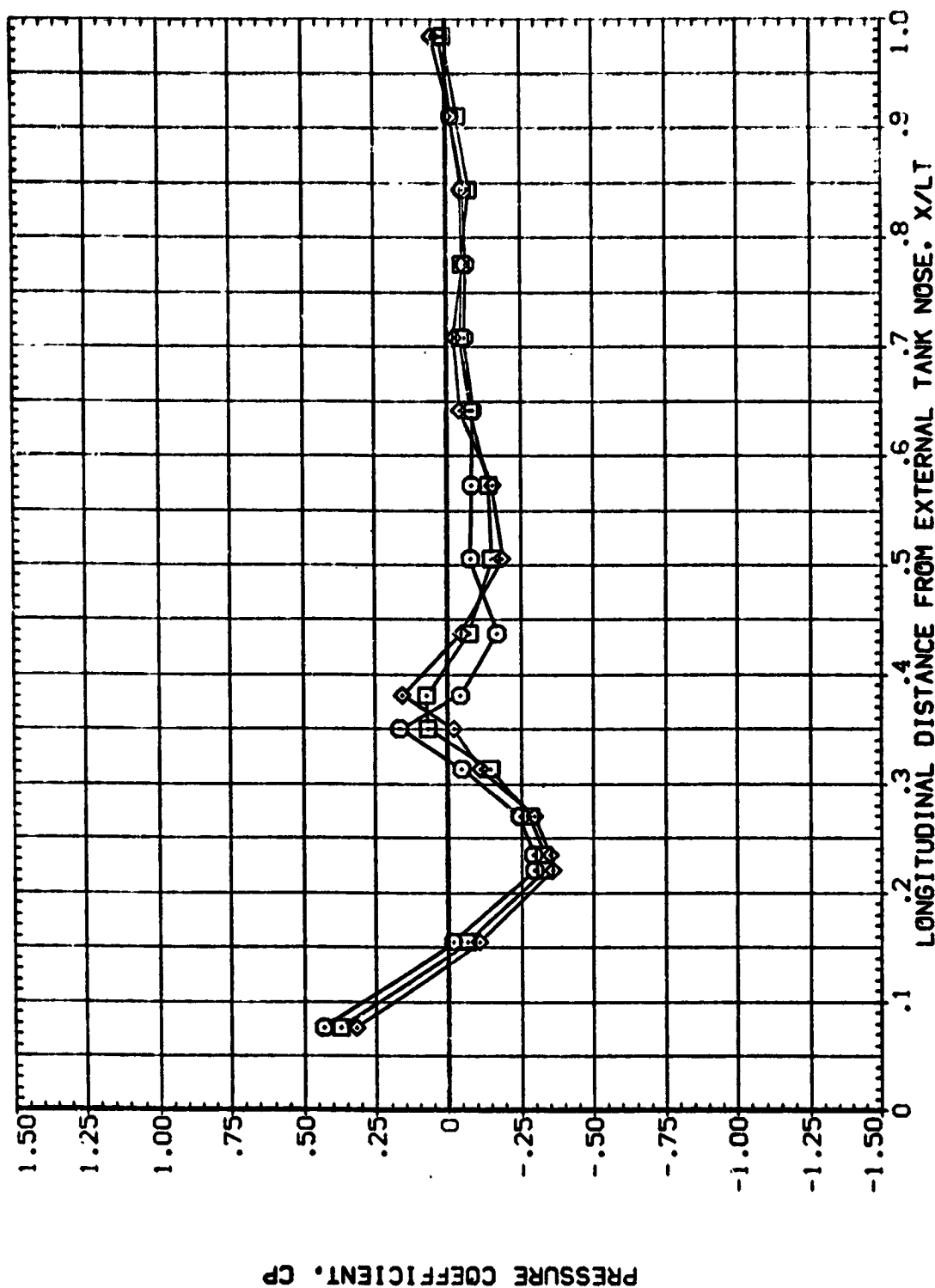
90.000  
 0.000  
 0.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

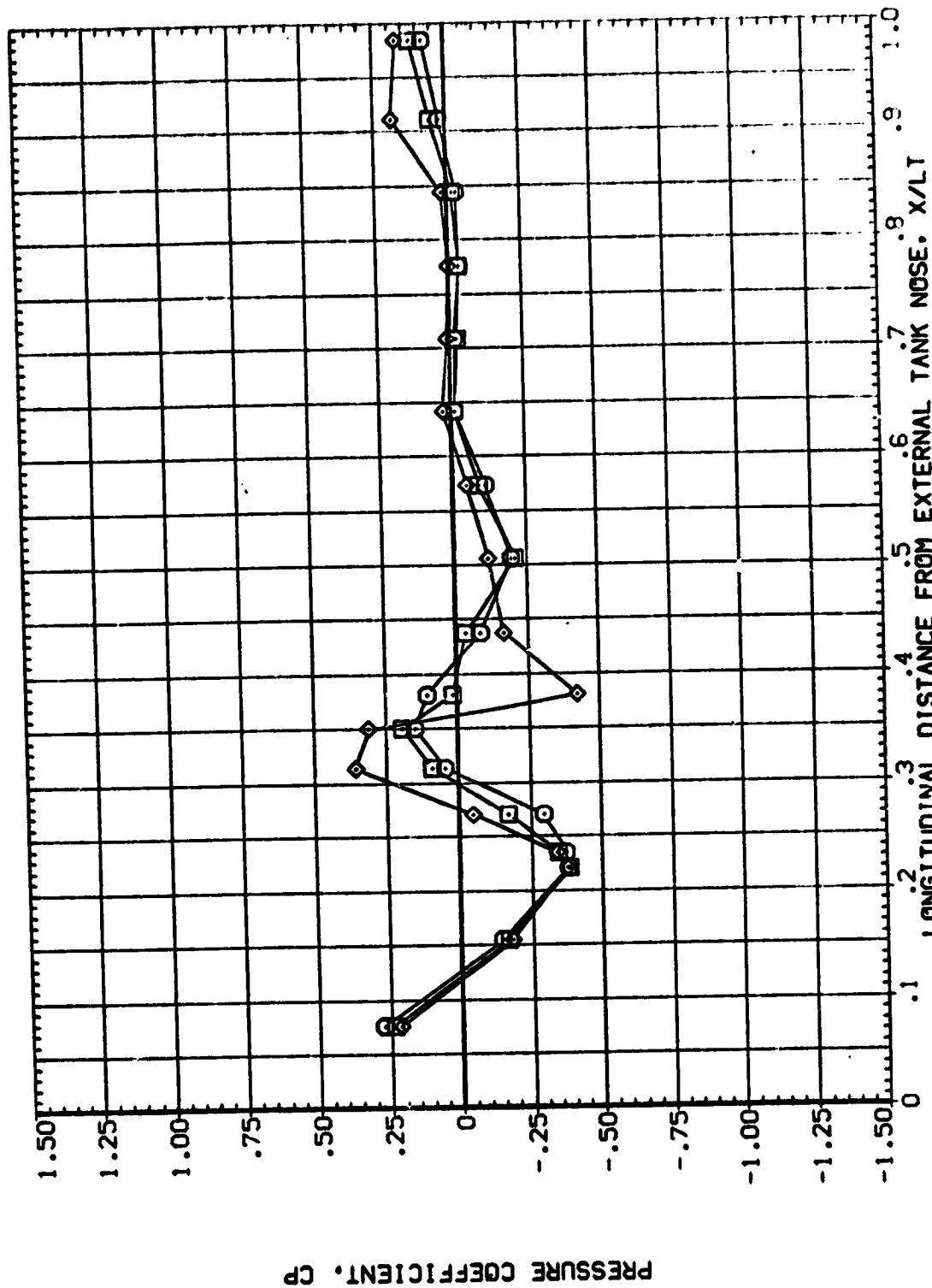
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONCIG	90.000
○	162.000	-8.000	1.250	5.313	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	180.000			5.313	5.313	5.313	2.549	IN.	X-SRB	.000	.000
◇	198.000			5.313	5.313	5.313	2.549	IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

REFERENCE DATA			PARAMETRIC VALUES		
PHI	BETA	MACH	CONF IG	ALPHA	
216.000	-8.000	1.250	.000	DELTA Z	90.000
234.000			.140	RUDER	.000
252.000			.000	CRB INC	.500
SREF	6.198	50. IN.			
LREF	5.313	IN.			
BREF	5.313	IN.			
XPRP	2.549	IN.			
YPRP	.000	IN.			
ZPRP	.000	IN.			

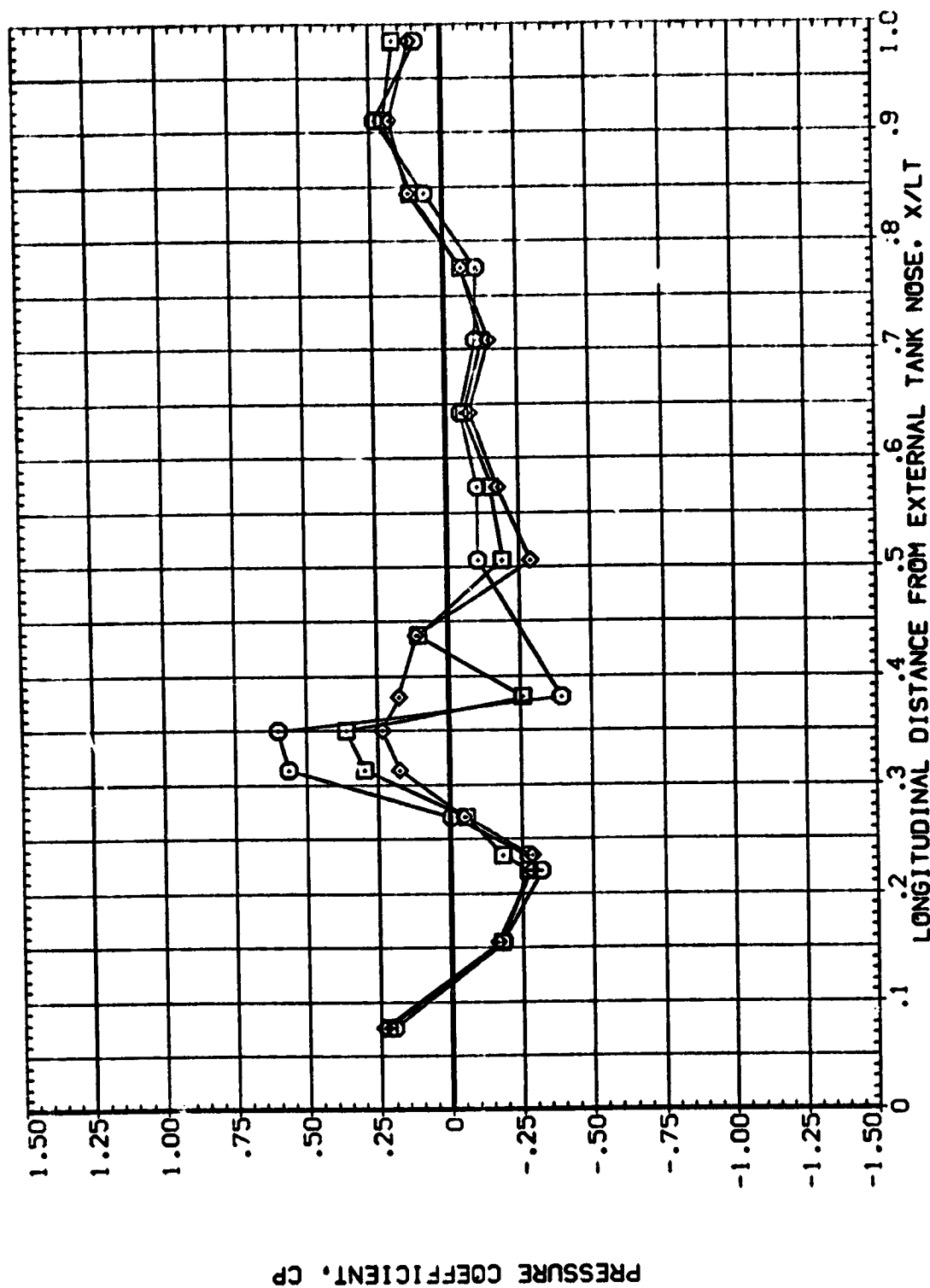


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	YPRP	ZPRP	SO. IN.	IN.
○	270.000	-8.000	1.250	6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	288.000									.140	.000
◇	306.000									.000	.500
										ALPHA	DELTA Z
											X-SRB



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82TC2)

SYMBOL

324.000  
342.000  
360.000

BETA MACH

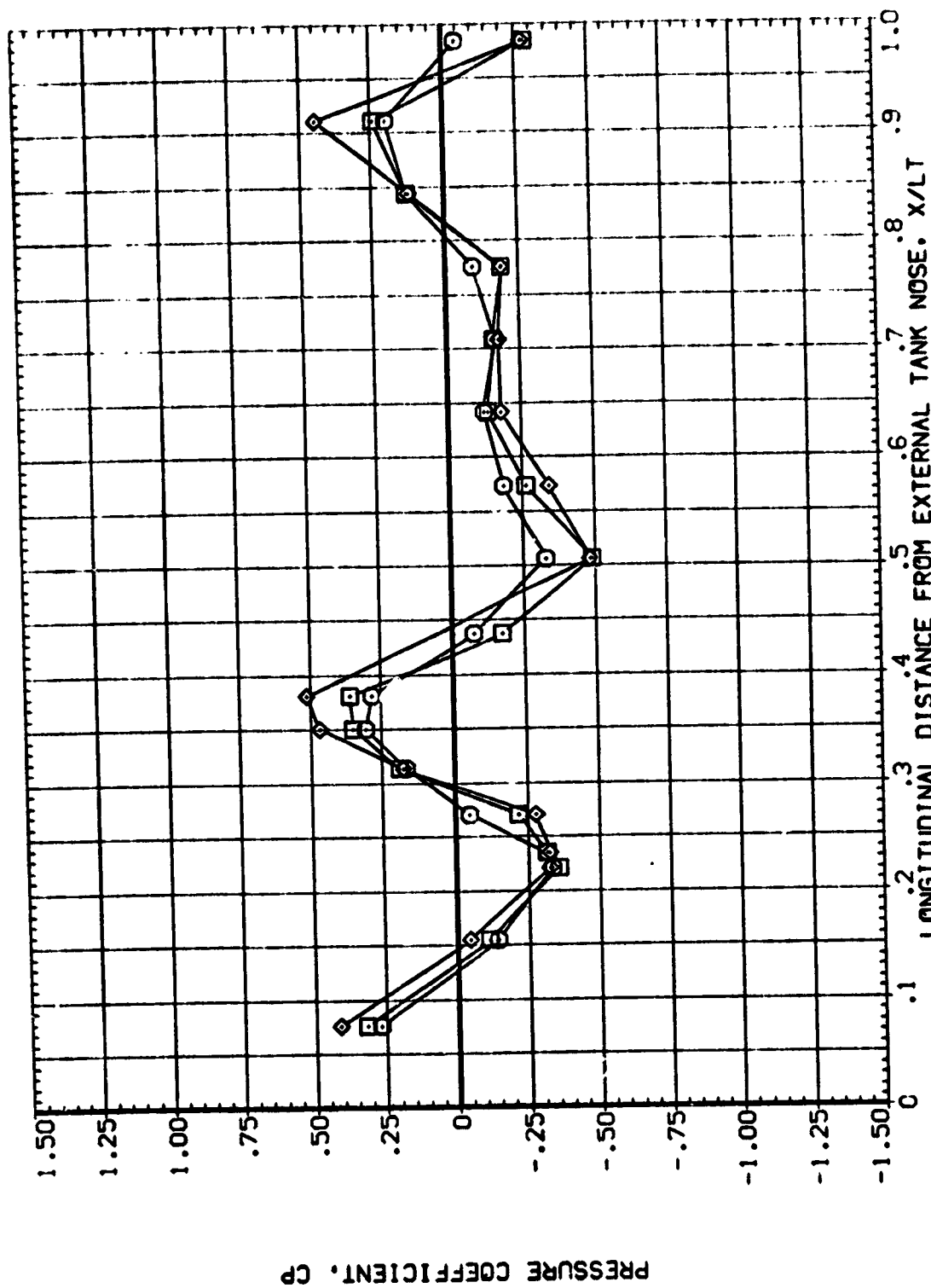
-8.000 1.250

## REFERENCE DATA

SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.548  
YMRP .000  
ZMRP .000

## PARAMETRIC VALUES

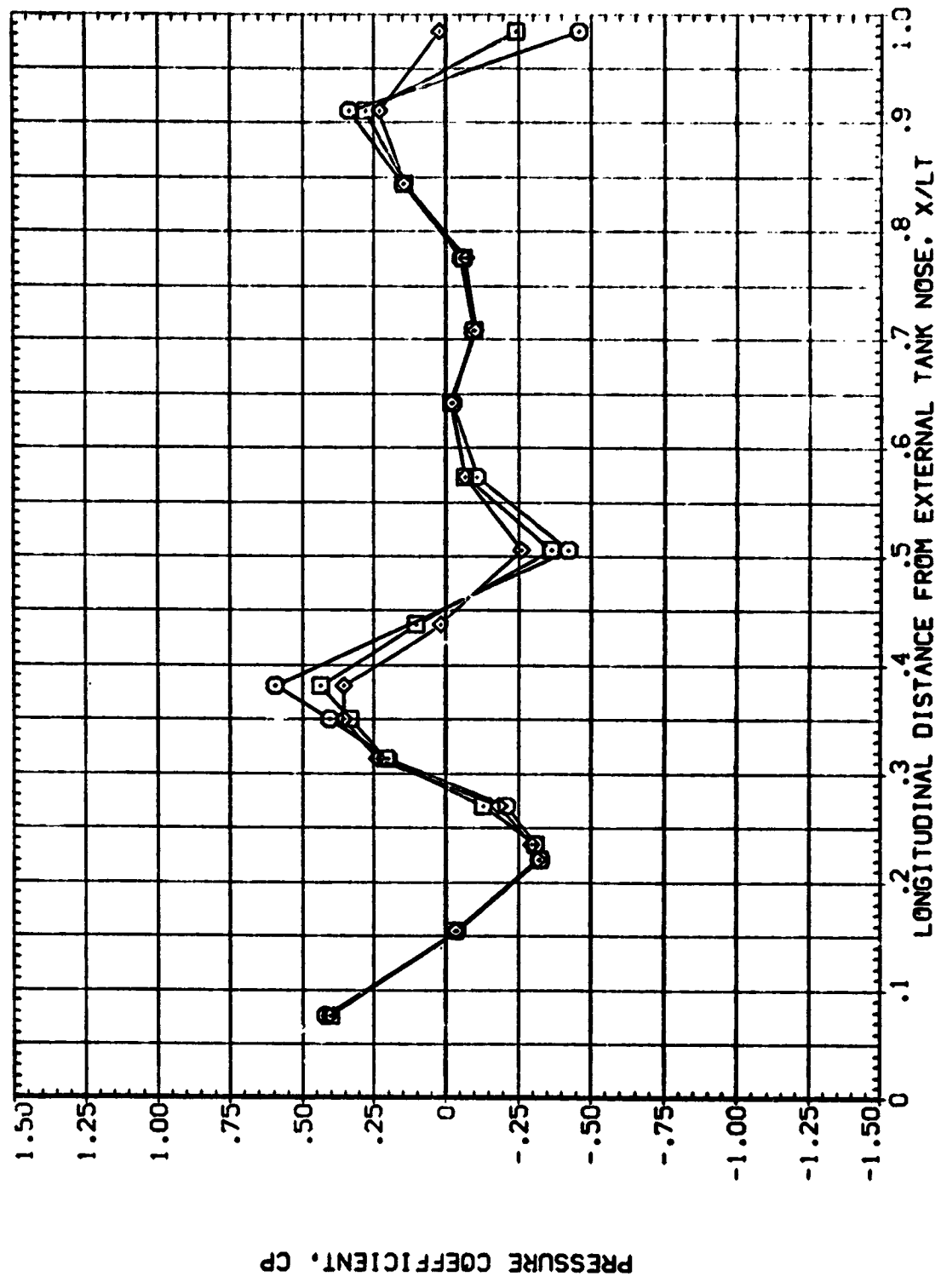
ALPHA .000  
DELTAZ .140  
X-SRB .000  
Y-SRB .000  
Z-SRB .000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

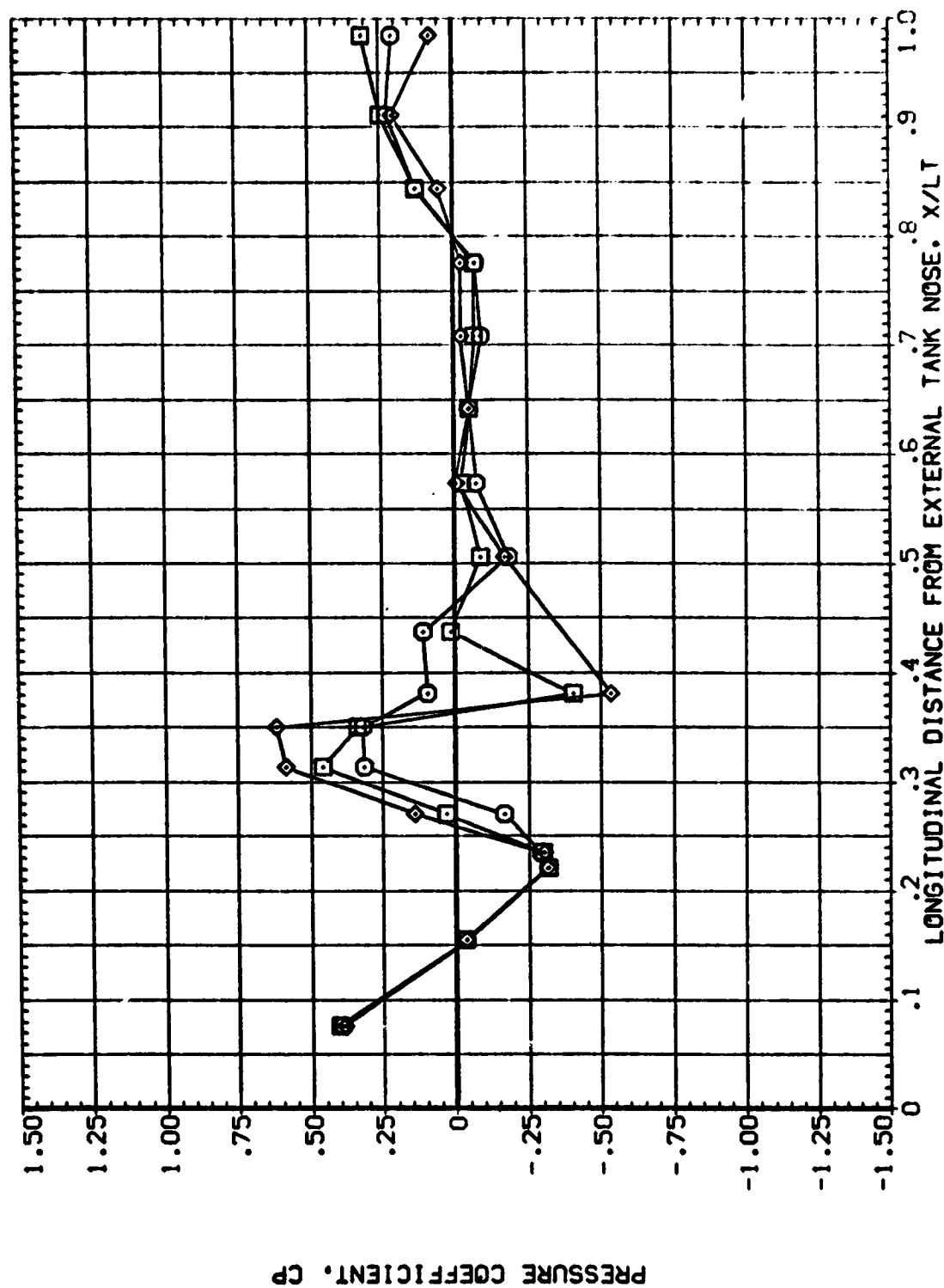
SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.000	.000	1.250	SREF 6.198	CONF IG .000
□	18.000			LREF 5.313	RUDER .140
◇	36.000			BREF 5.313	ORGINC .000
				XMRP 2.549	
				YMRP .000	
				ZMRP .000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

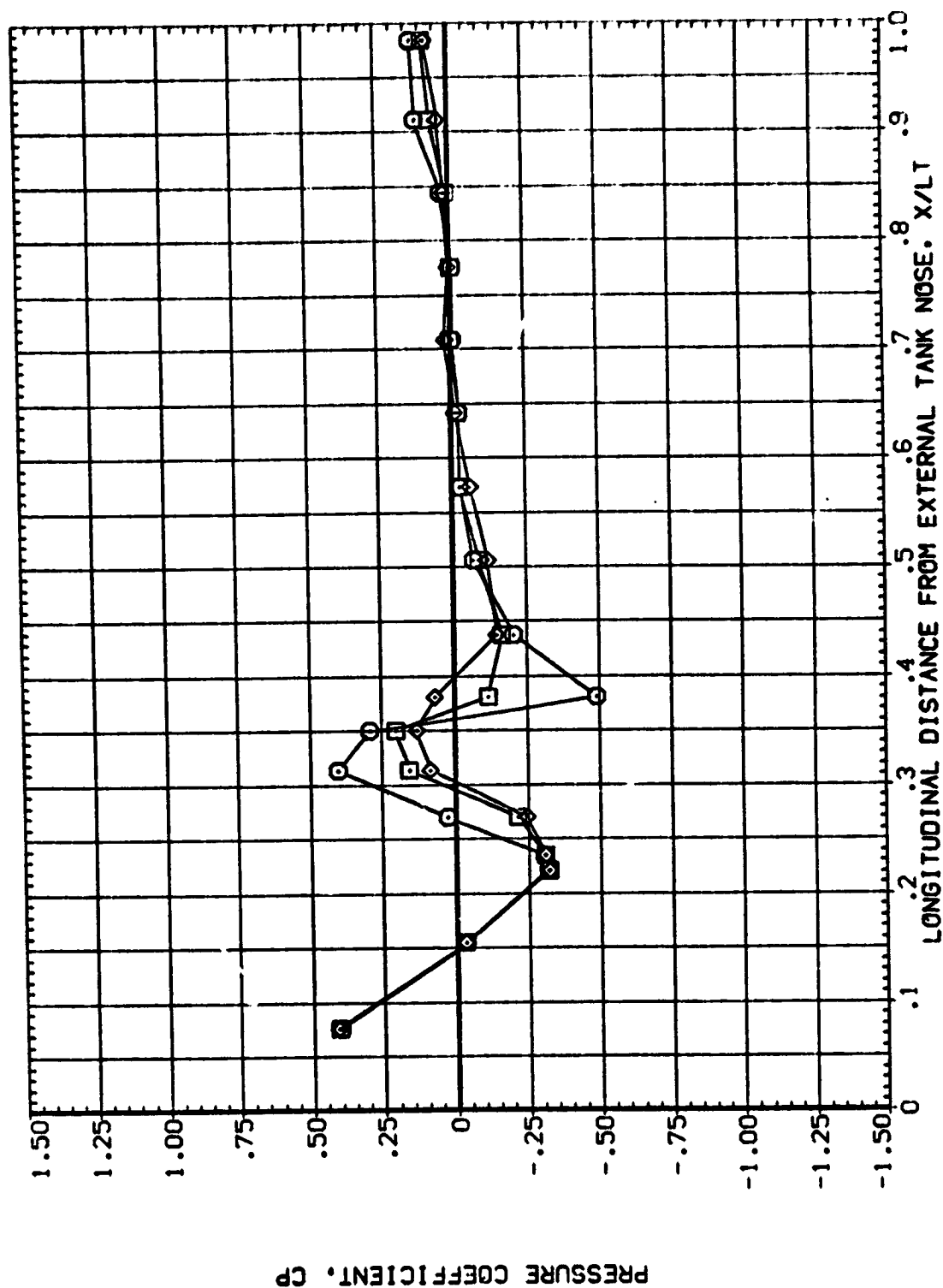
SYMBOL	PHI	BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES											
				SREF	LREF	BREF	XMRP	ZMRP	SO. IN.	IN.	IN.	IN.	ALPHA	DELTA Z	X-SRB	CONF IG	RCTER	CRBINC	50.000	.000	.000
○	54.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
□	72.000	.000	1.250	5.313	5.313	5.313	2.549	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
◇	90.000	.000	1.250	2.549	2.549	2.549	2.549	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

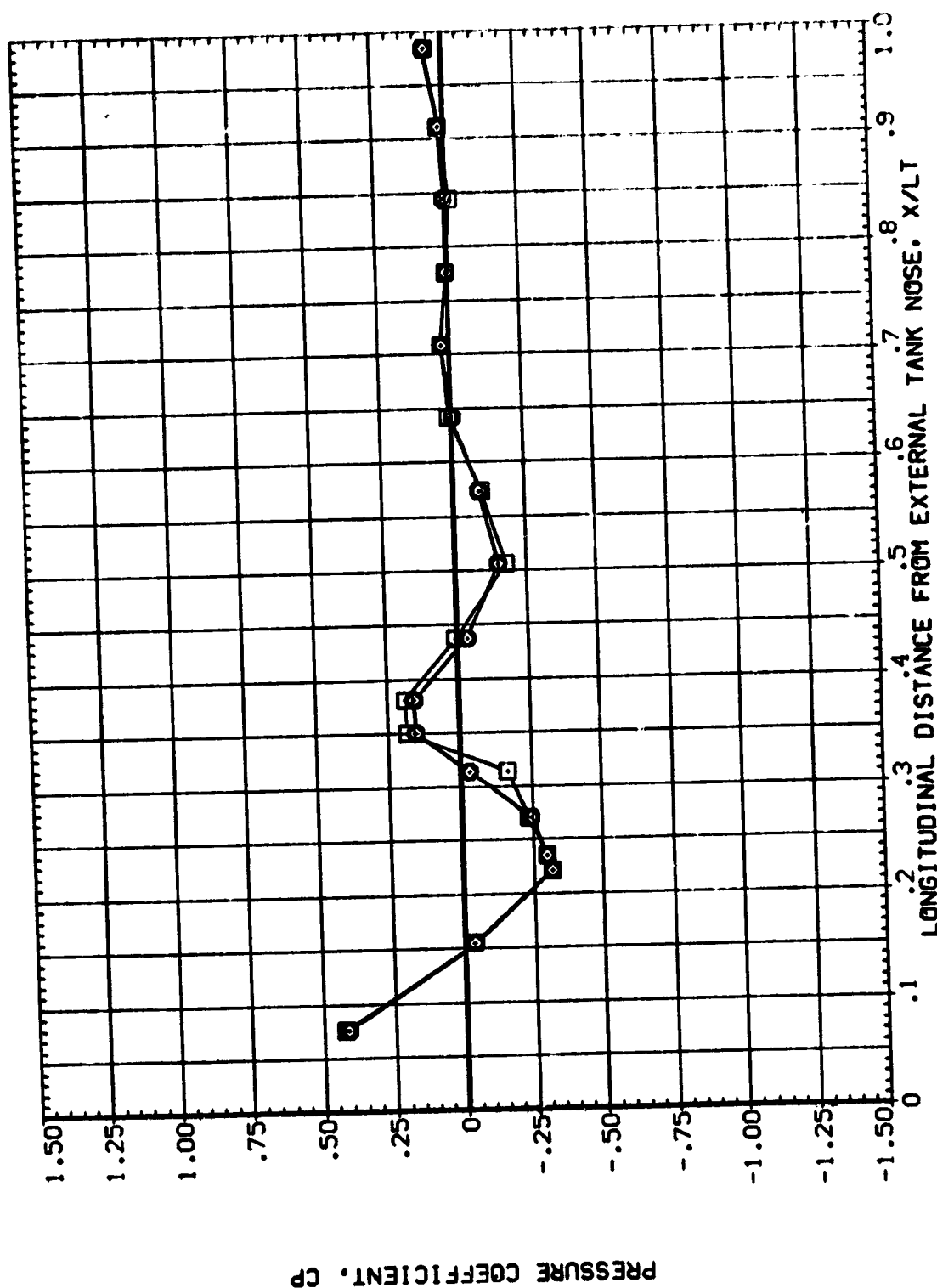
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMREF	SD. IN.	ALPHA	CONF. IS	
○	108.000	.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	90.000
□	126.000							IN.	X-SRB	.140	.000
◇	144.000							IN.		.000	.500
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

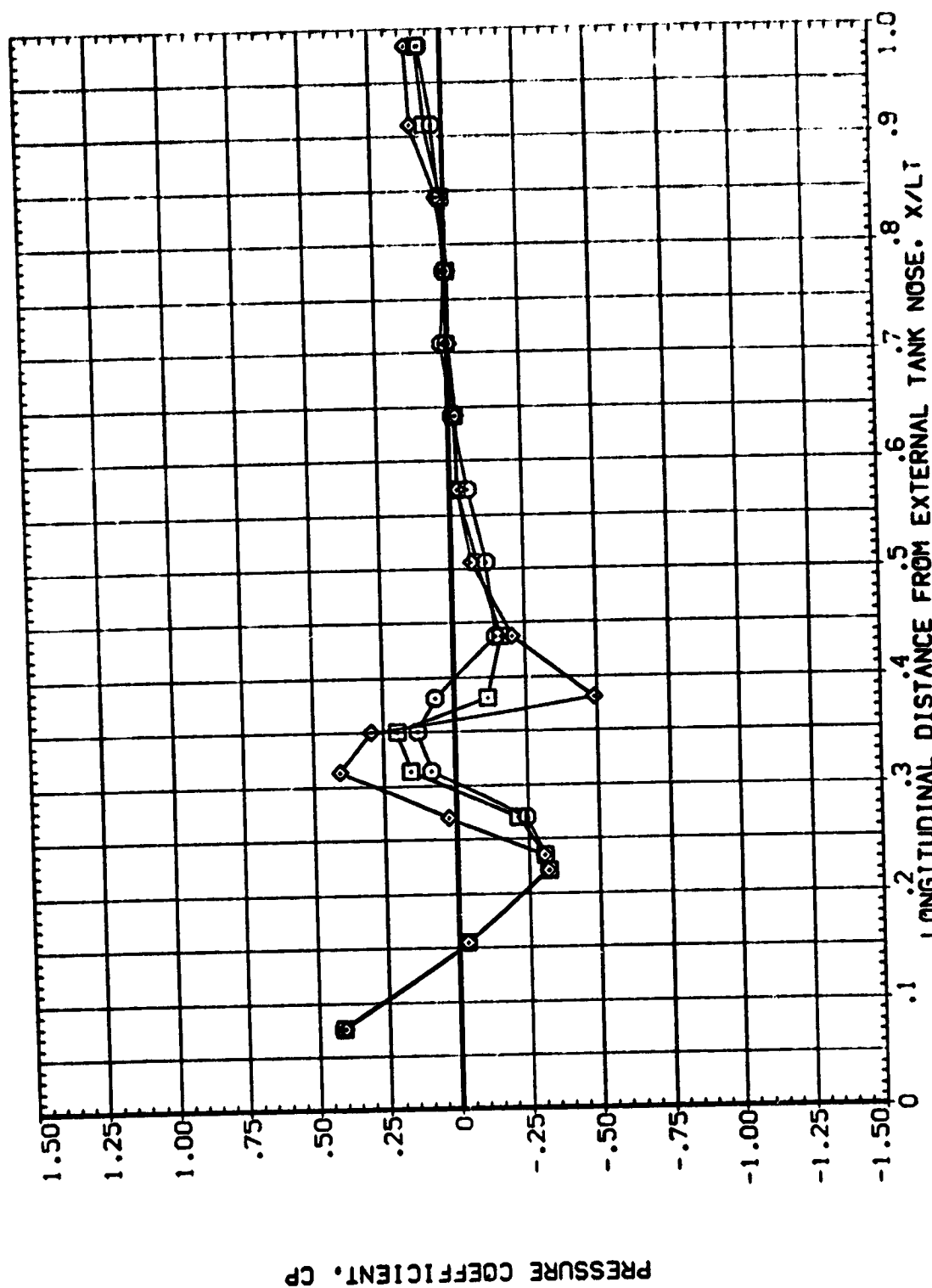
PARAMETRIC VALUES		REFERENCE DATA		ALPHA	
PHI	BETA	SREF	5.198	CONF 16	90.000
162.000	.000	LREF	5.313	DELTA Z	.000
180.000	1.250	BREF	5.313	RUDER	.000
198.000		XMRP	2.549	ORIGIN	.500
		YMRP	.000		
		ZMRP	.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

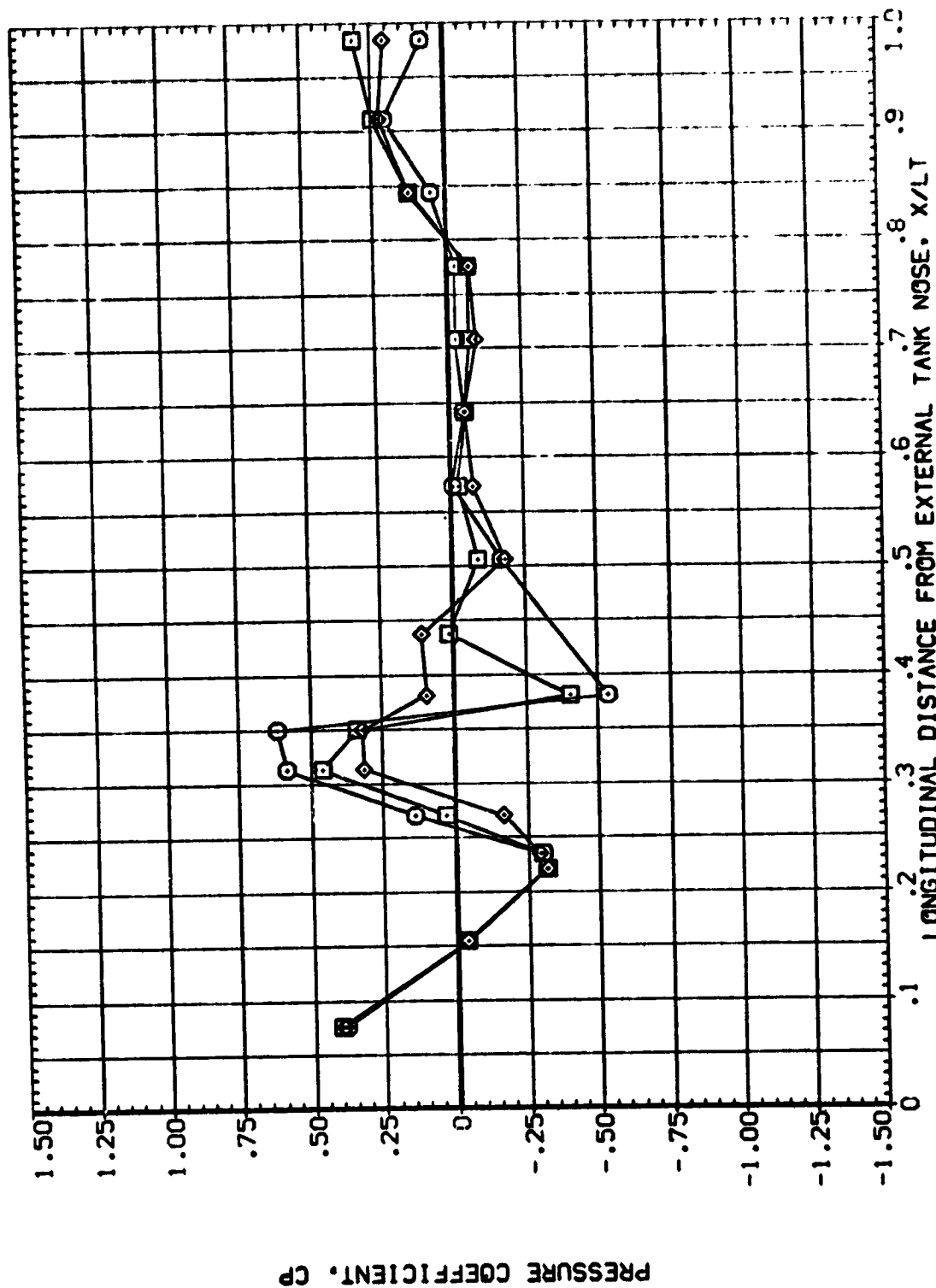
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	ALPHA	CONV IG	RUE/ER	CRB/NC
○	216.000	.000	1.250	6.198	3.313	3.313	.000	.000	.000	.140	.000
□	234.000			2.549				X-SRB			.500
◇	252.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES										
	270.000	288.000	.000	1.250	SREF	LREF	BREF	YMRP	ZMRP	6.198	5.313	5.313	2.549	.000	.000	ALPHA	DELTA Z	X-SRB	CONF IG	R-DOCK	SRB INC
○																					
□																					
◇																					



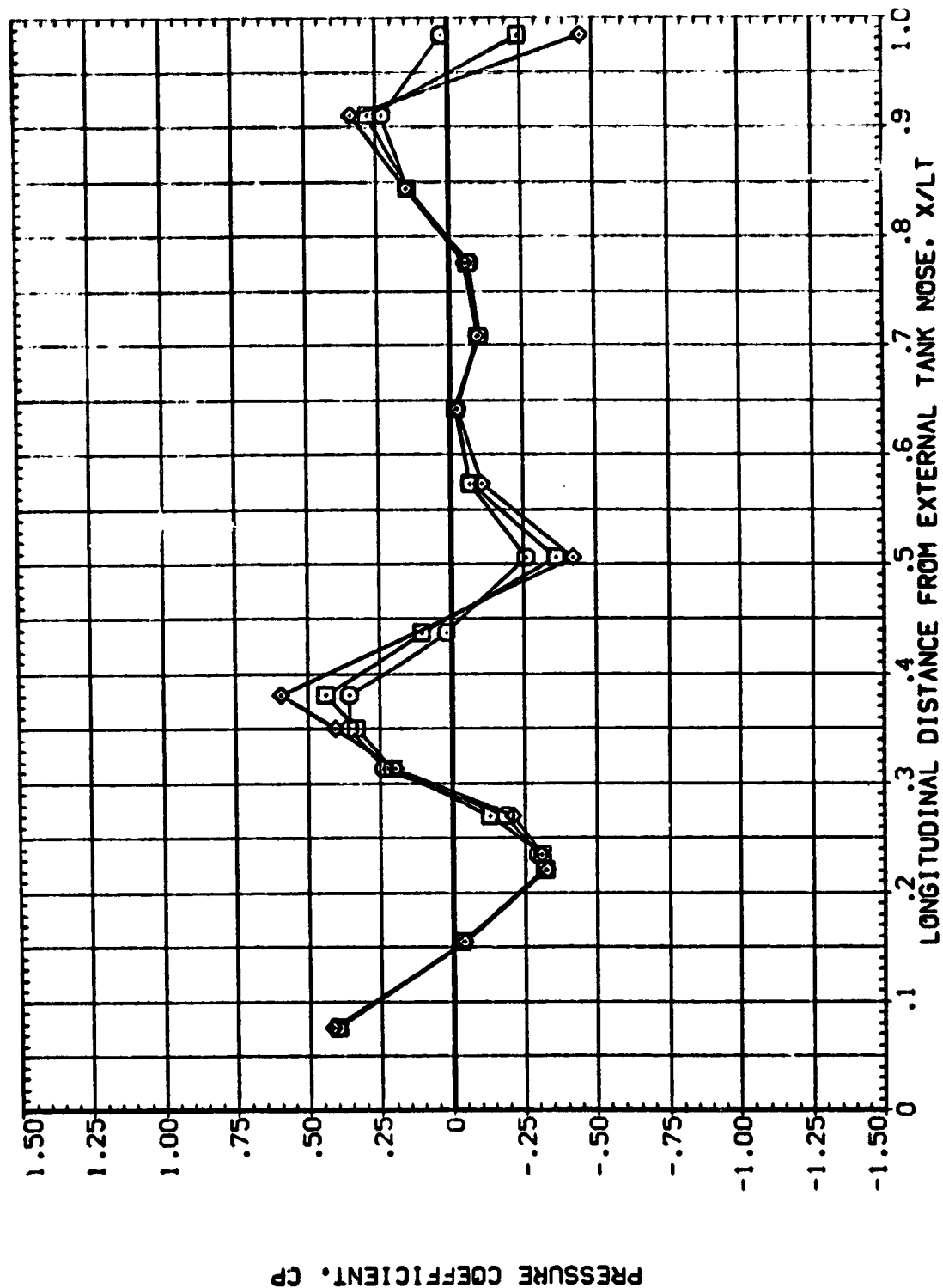
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTAZ
○	324.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	342.000									.140	RUDER
◇	360.000									.000	CRBINC



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL

PHI  
.000  
18.000  
36.000

BETA  
8.000  
1.250

MACH

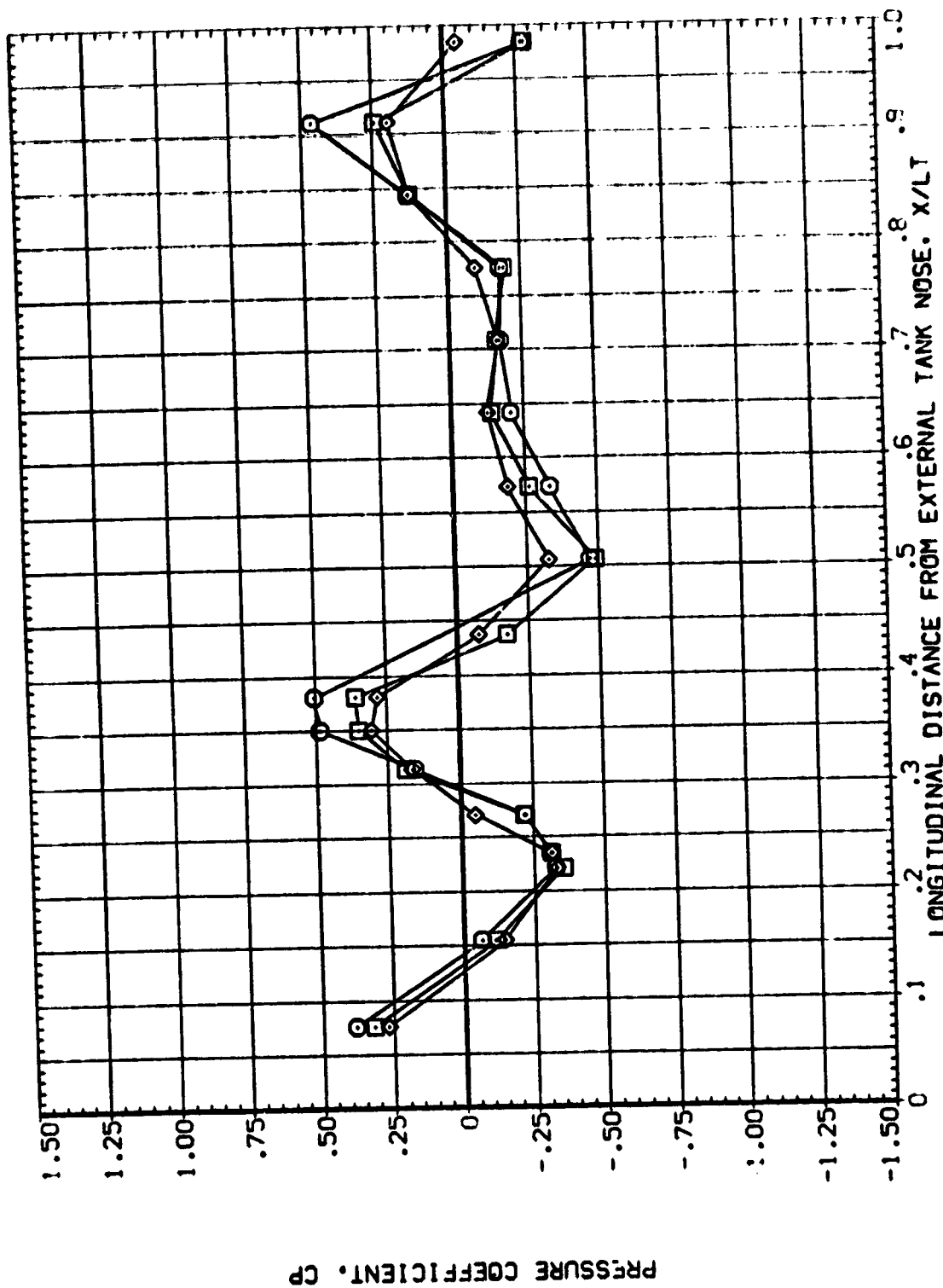
REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
YMRP 2.549  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA  
X-SUB

PARAMETRIC VALUES  
.000  
.000  
.000  
.000  
.000

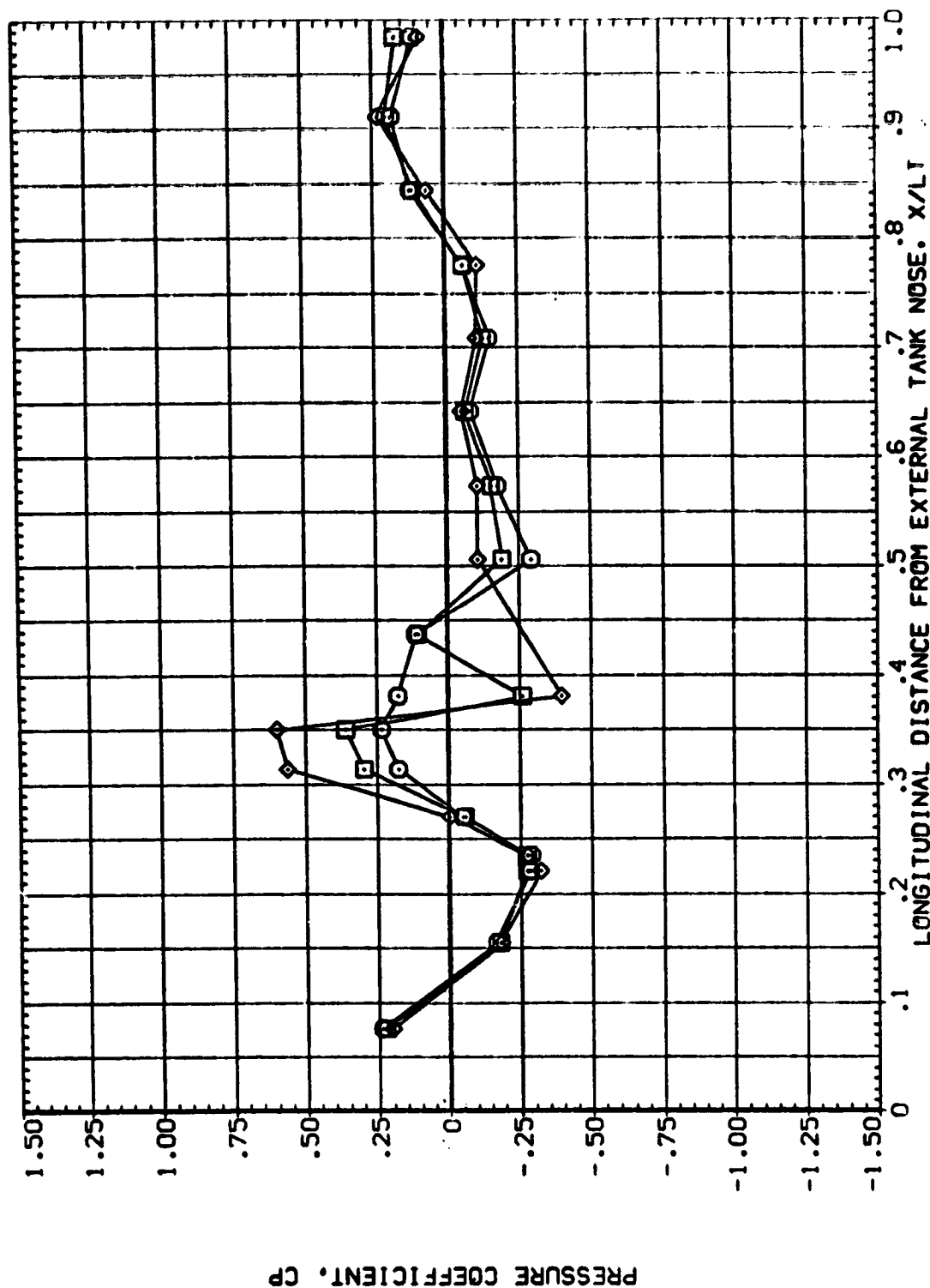
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

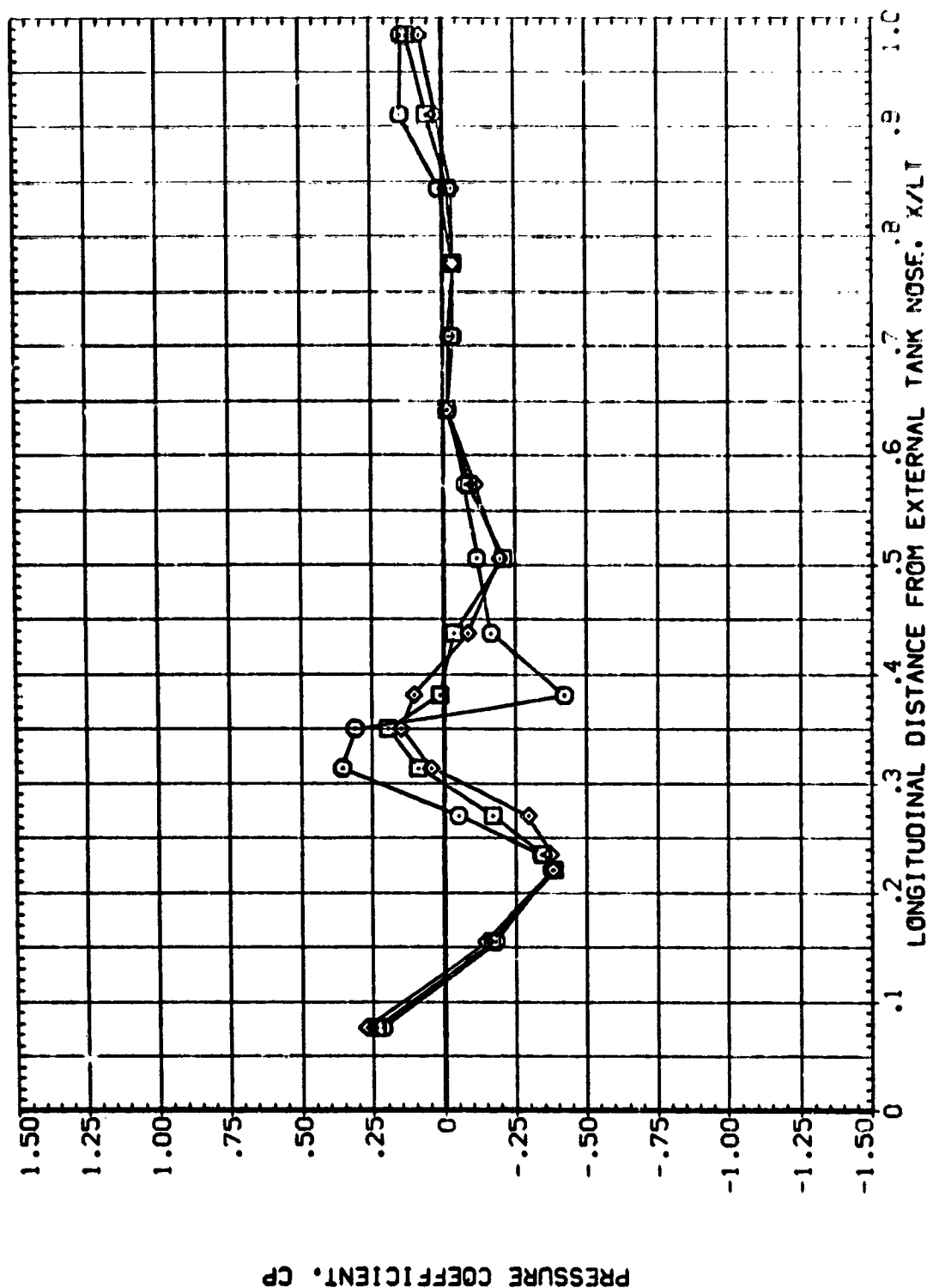
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	6.198	ALPHA	CONF IG	90.000
○	54.000	8.000	1.250	LREF	5.313	DELTA Z	RUDDER	.000
□	72.000			XMREF	5.313	X-SRB	.140	.000
◇	90.000			YMREF	2.549		.000	.500
				ZMREF	.000			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

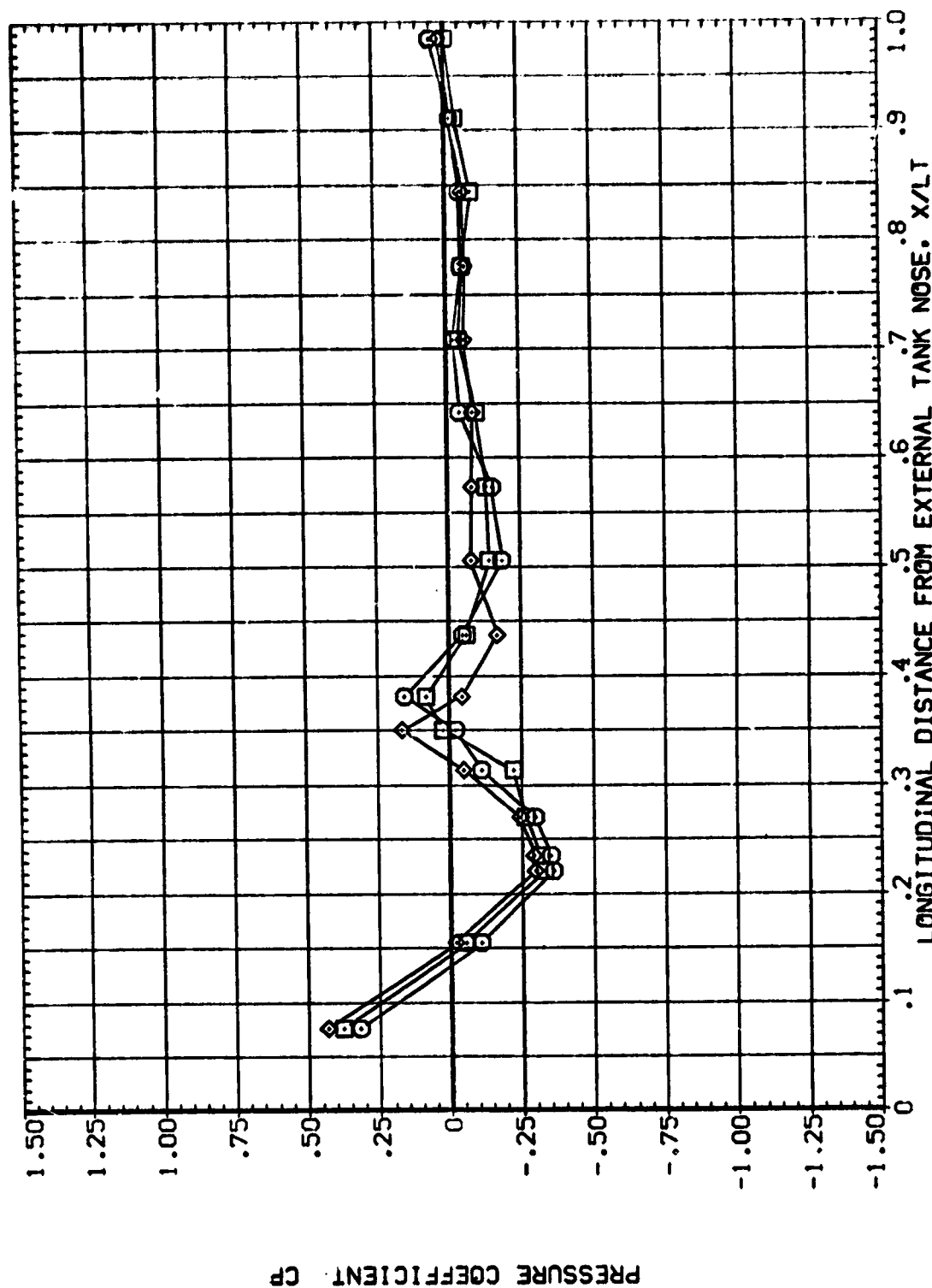
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO.IN.	ALPHA	SO.IN.
○	108.000	8.000	1.250	5.198	50.000	.000	50.000
□	126.000			5.313	IN.	.140	IN.
◇	144.000			2.549	IN.	.000	IN.
				2.549	IN.	.000	IN.
				2.549	IN.	.000	IN.



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	FHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	5Q. IN.	CONF 15	90.000
○	162.000	8.000	1.250	LREF	5.313 IN.	DELTA Z	.000
□	180.000			BREF	5.313 IN.	RUDDER	.000
◇	198.000			XMRP	2.549 IN.	9RB1NC	.500
				YMRP	.000 IN.		
				ZMRP	.000 IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

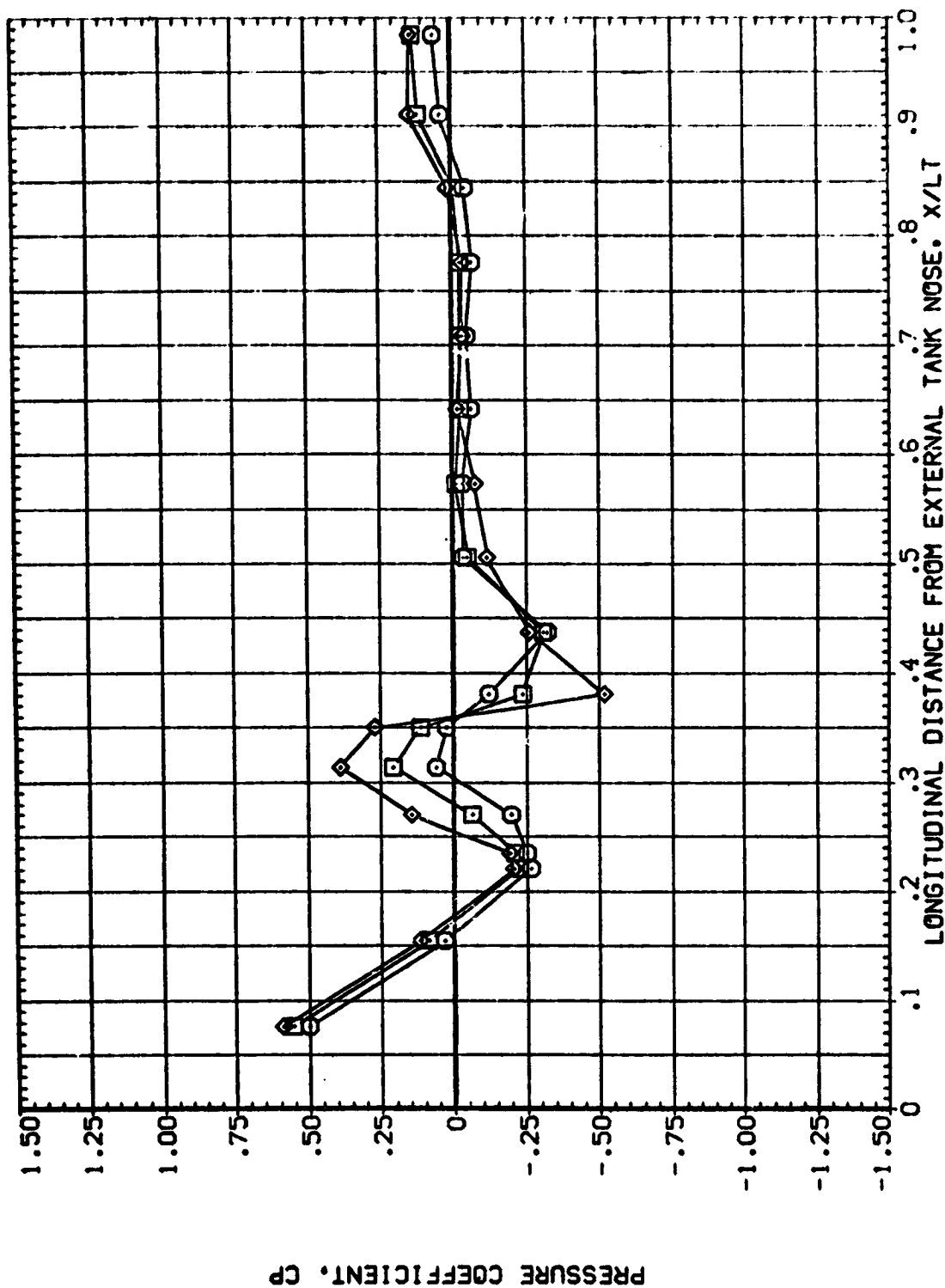
SYMBOL  
 ○  
 □  
 ◇

PHI  
 216.000  
 234.000  
 252.000

BETA  
 8.000  
 MACH  
 1.250

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 YMRP 2.549 IN.  
 ZMRP .000 IN.

PARAMETRIC VALUES  
 .000 CONFIG  
 .140 RUDDER  
 .000 ORBINC  
 90.000  
 .000  
 500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82C2)

SYMBOL  
○ □ ◇

PHI  
270.000  
288.000  
306.000

BETA  
8.000

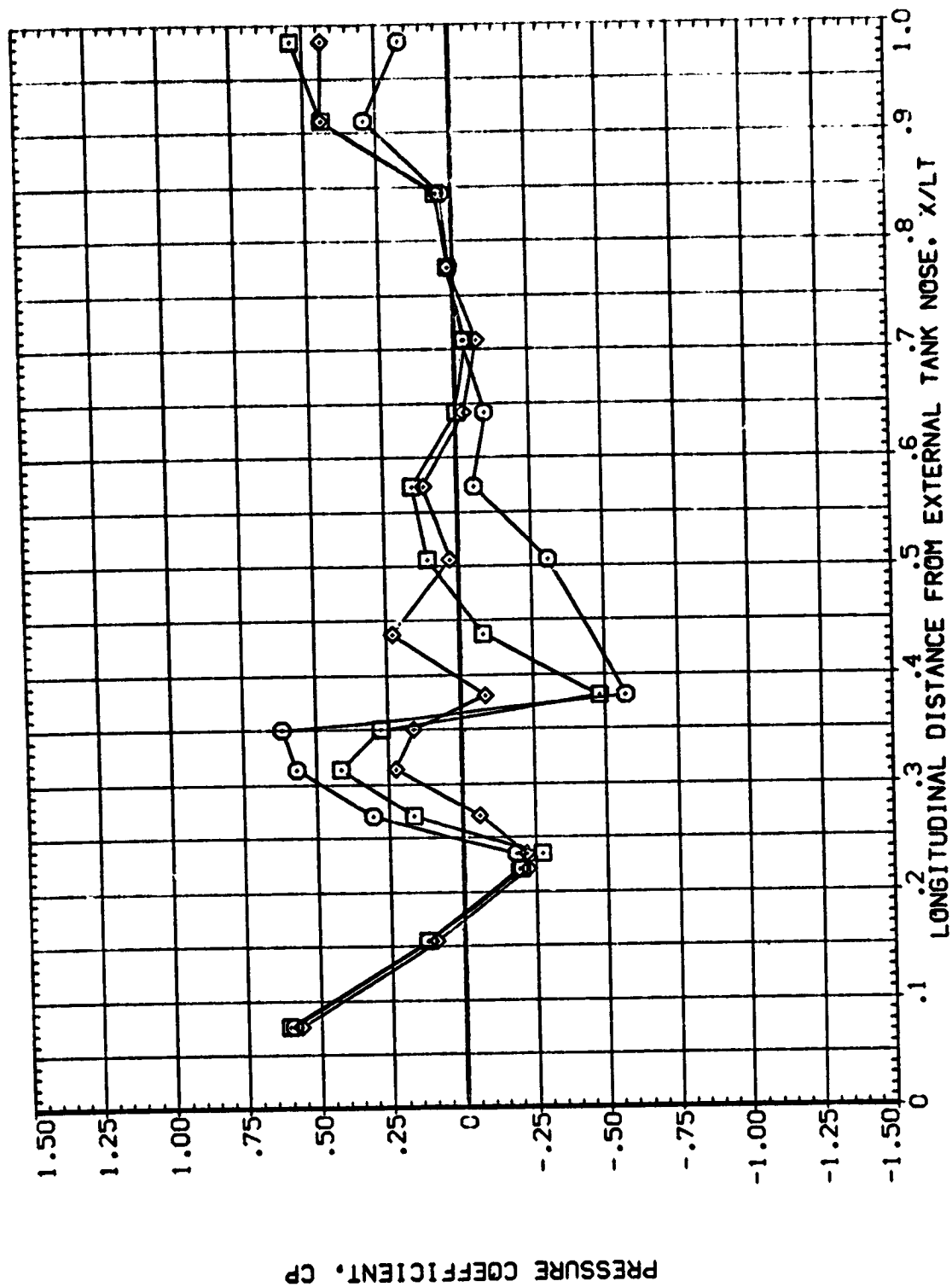
MACH  
1.250

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
CONFIS .000  
RUDDER .140  
OSBINC .000  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03







MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

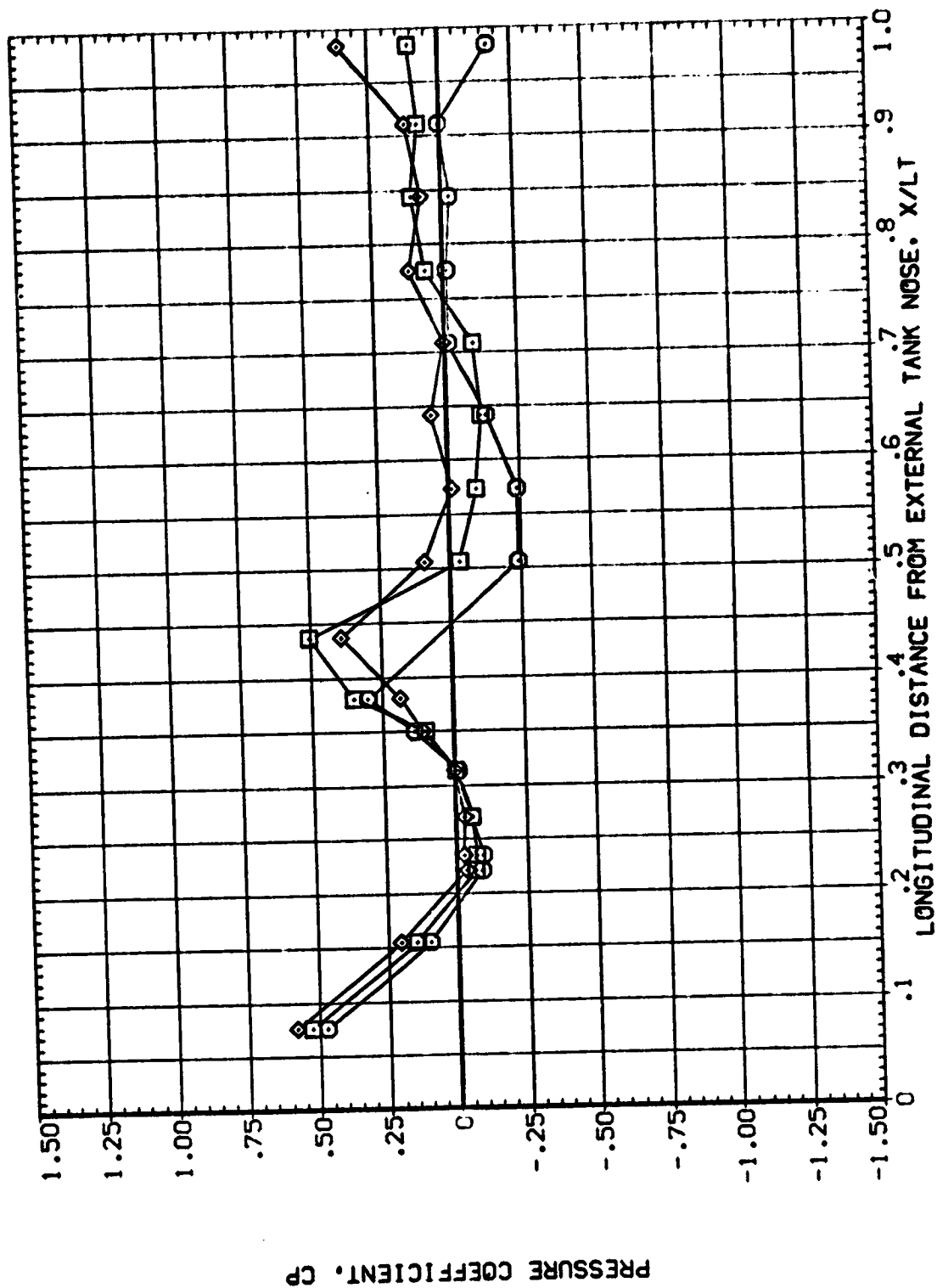
SYMBOL  
◇  
□

PHI  
.000  
18.000  
36.000

BETA  
-8.000  
MACH  
1.960

REFERENCE DATA  
SREF 6.198 SQ. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XPRP 2.549 IN.  
YPRP .000 IN.  
ZPRP .000 IN.

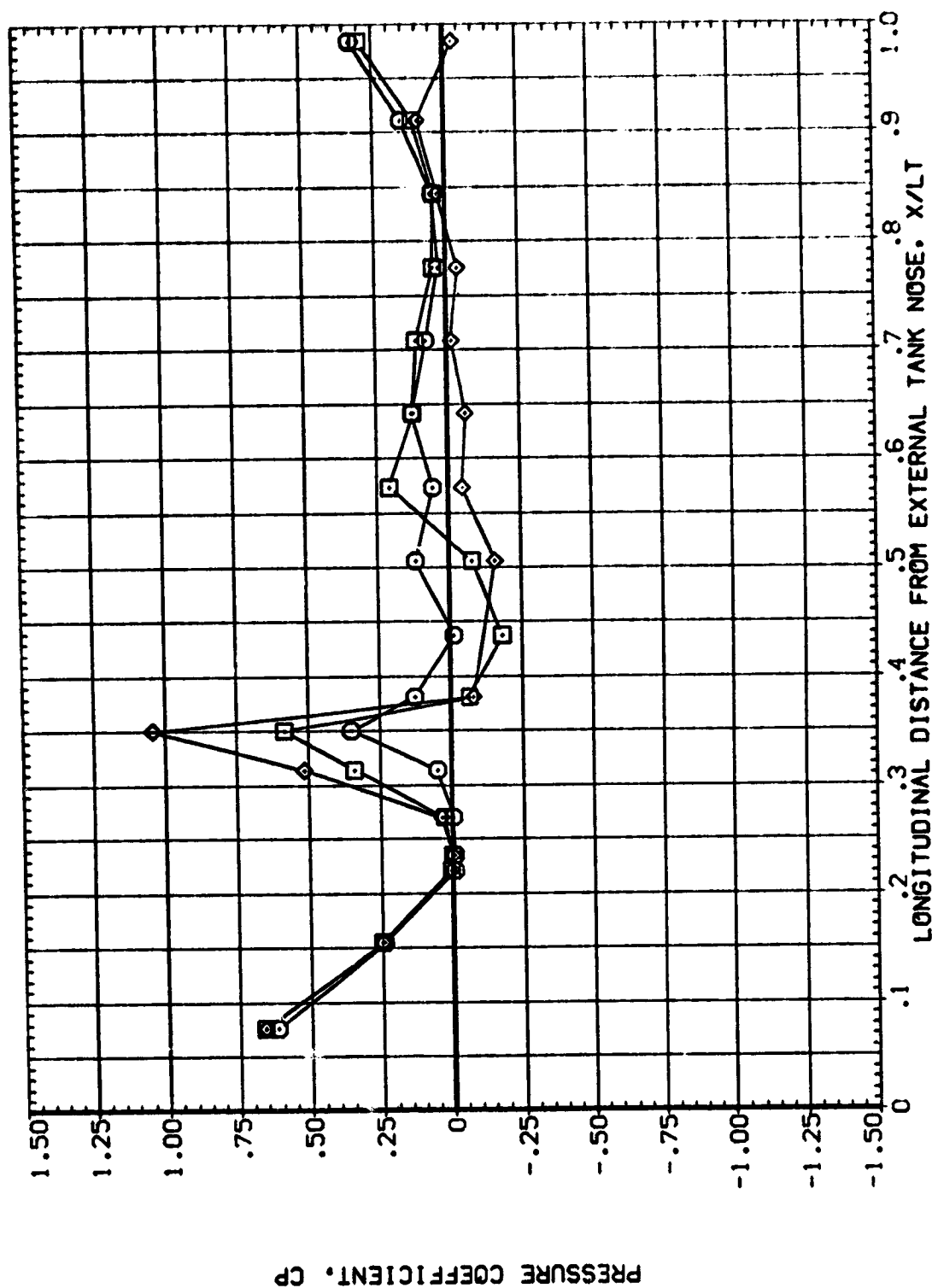
PARAMETRIC VALUES  
.000 CONFIS 90.000  
.140 RUDDER .000  
.000 DRBINC .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PMI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	ALPHA	CONF	CONF
○	54.000	-8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTAZ	.000	.000
□	72.000							IN.	X-SRB	.140	.500
◇	90.000							IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 108.000  
 126.000  
 144.000

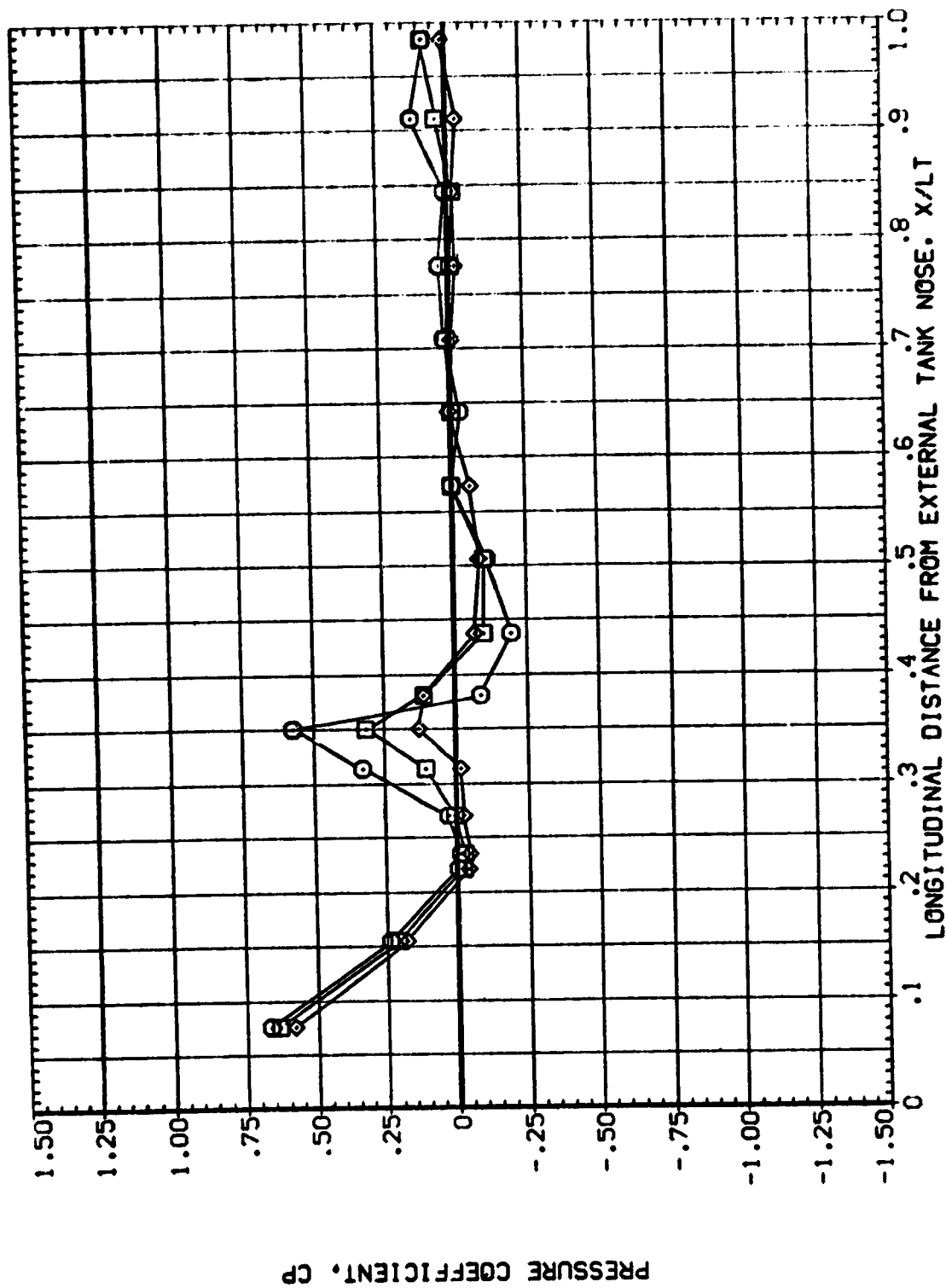
BETA  
 -8.000

MACH  
 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 .000 CONF IG  
 .140 RUDDER  
 .000 ORB INC



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 162.000  
 180.000  
 198.000

BETA  
 -8.000

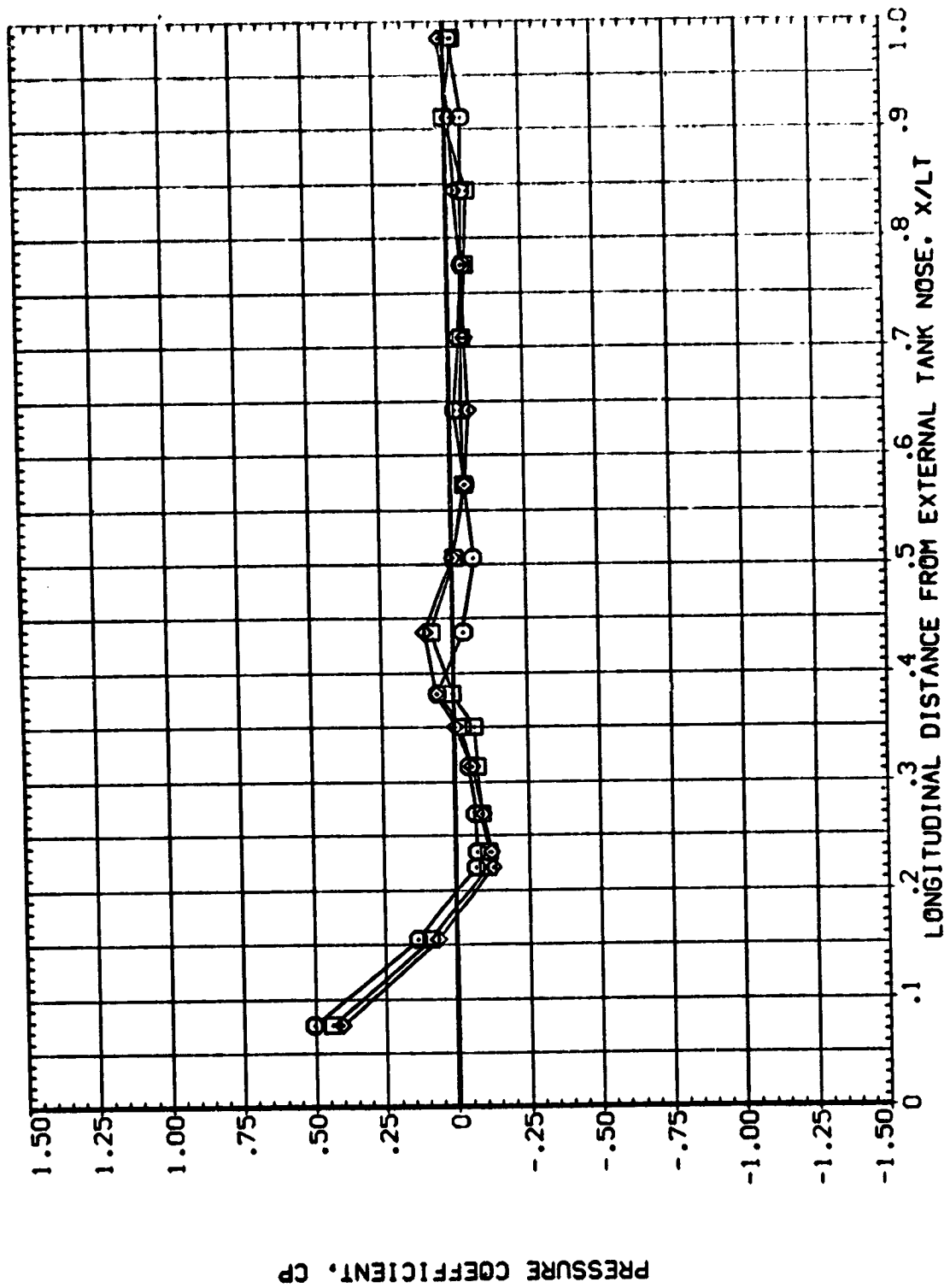
MACH  
 1.960

REFERENCE DATA  
 SREF 6.199  
 LREF 5.313  
 PREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 CONF IG .000  
 RUDDER .140  
 OFB INC .000  
 OFB INC .500

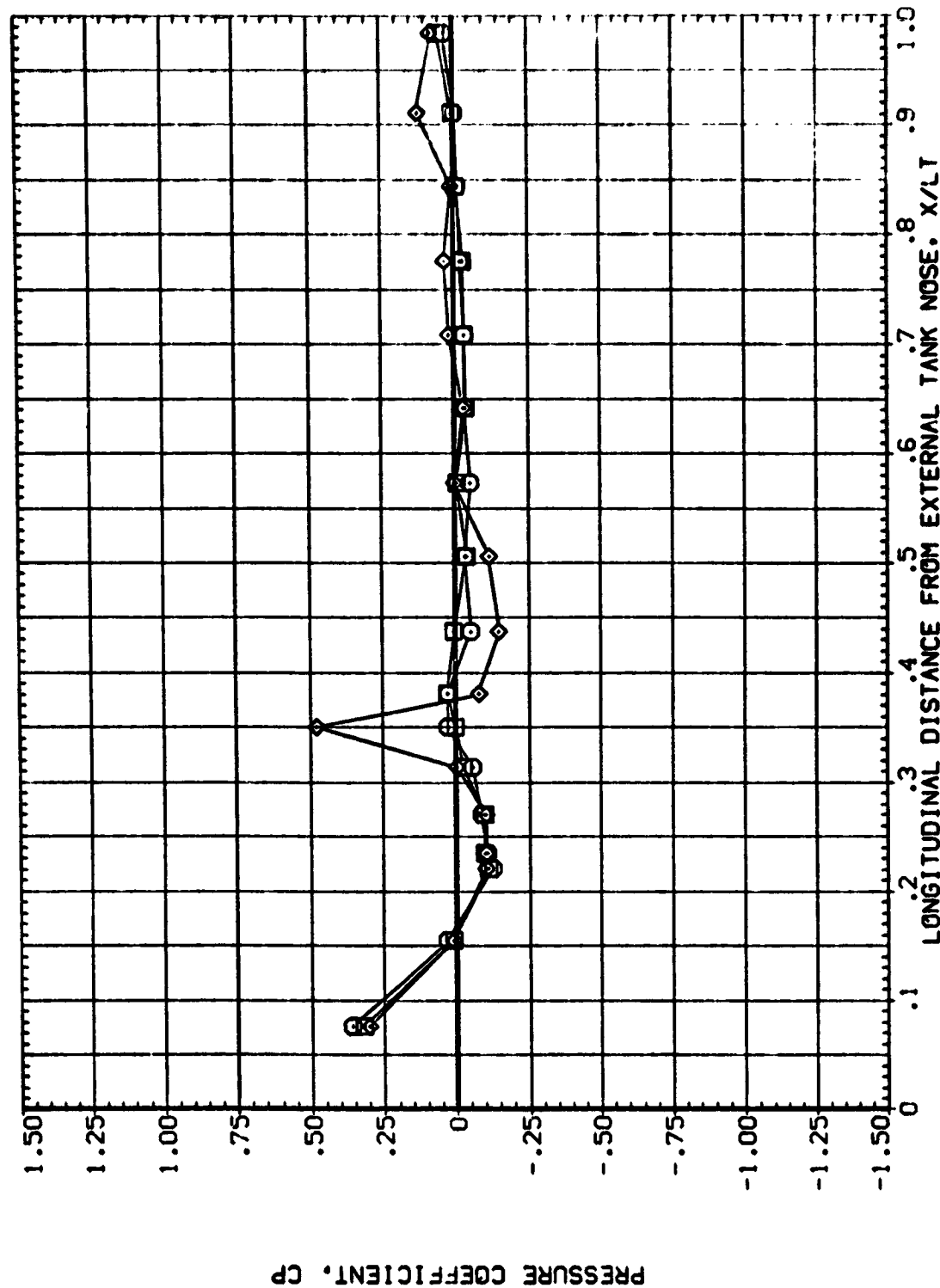


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

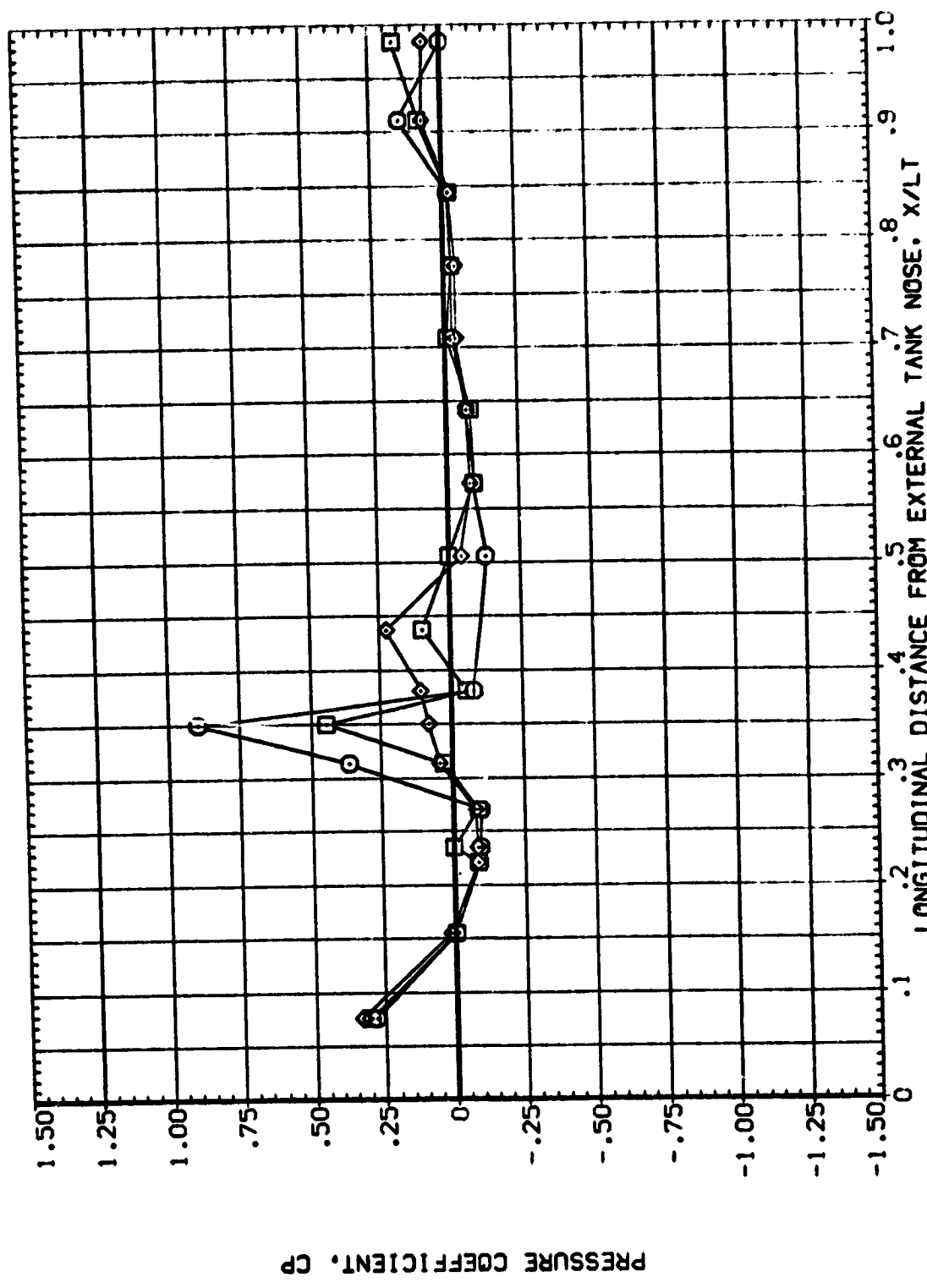
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONFIG	SO.000
○	216.000	-8.000	1.960	LREF	5.313 IN.	DELTA Z	.000
□	234.000			BREF	5.313 IN.	RJDDER	.000
◇	252.000			XMRP	2.549 IN.	ORRINC	.500
				YMRP	.000 IN.		
				ZMRP	.000 IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82TC)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CL	CD
○	270.000	-8.000	1.960	6.198	5.313	5.313	2.549	0.000	0.000	0.000	0.000
□	288.000							.140	.000	.000	.000
◇	306.000							X-SRB	.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

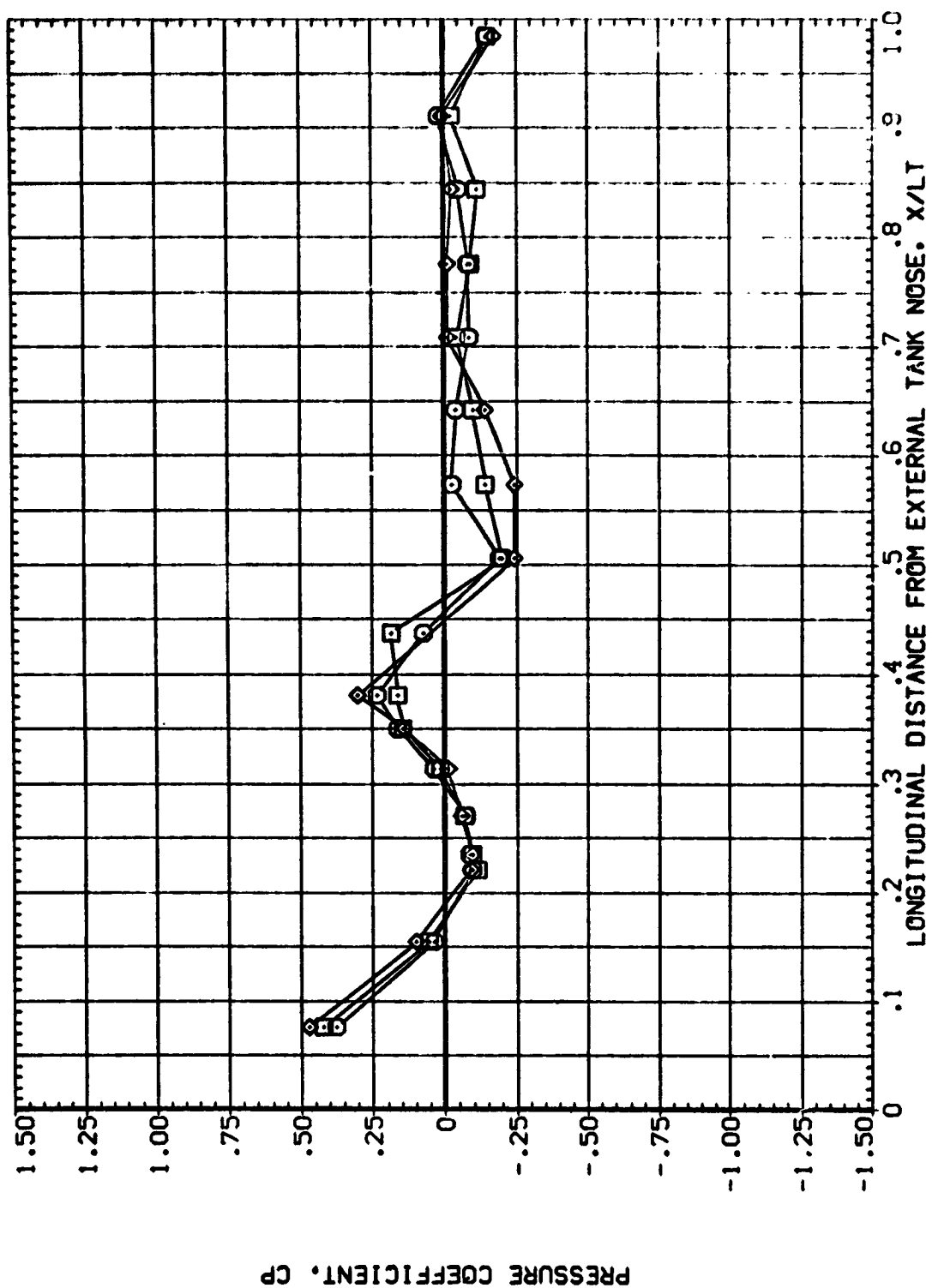
SYMBOL  
○  
□  
◇

PHI 324.000  
342.000  
360.000

BETA -8.000  
MACH 1.960

REFERENCE DATA  
SREF 6.198 SQ. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
YPRP 2.548 IN.  
ZPRP .000 IN.

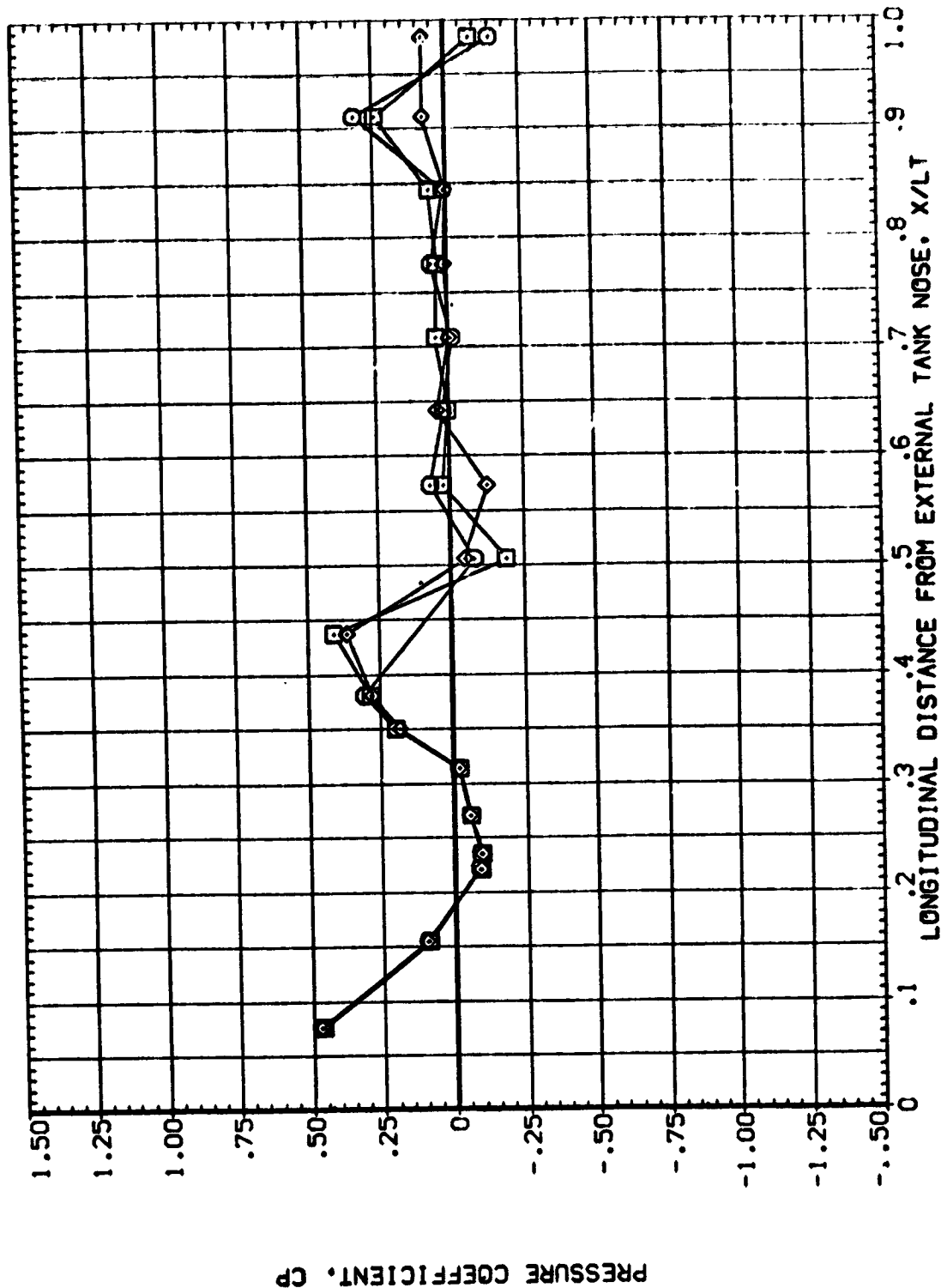
PARAMETRIC VALUES  
CONF IG 90.000  
RUDER .000  
DRB INC .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA					PARAMETRIC VALUES			
	.000	18.000	.000	1.960	SREF	6.198	SO. IN.	ALPHA	COO	CONF IG	COO	CONF IG	90.000
○					LREF	5.313	IN.	DEL TAZ	.143	RUTTER	.000		.000
□					BREF	5.313	IN.	X-SRB	.000	DRBINC	.000		.500
◇					YREF	2.549	IN.						
					ZREF	.000	IN.						

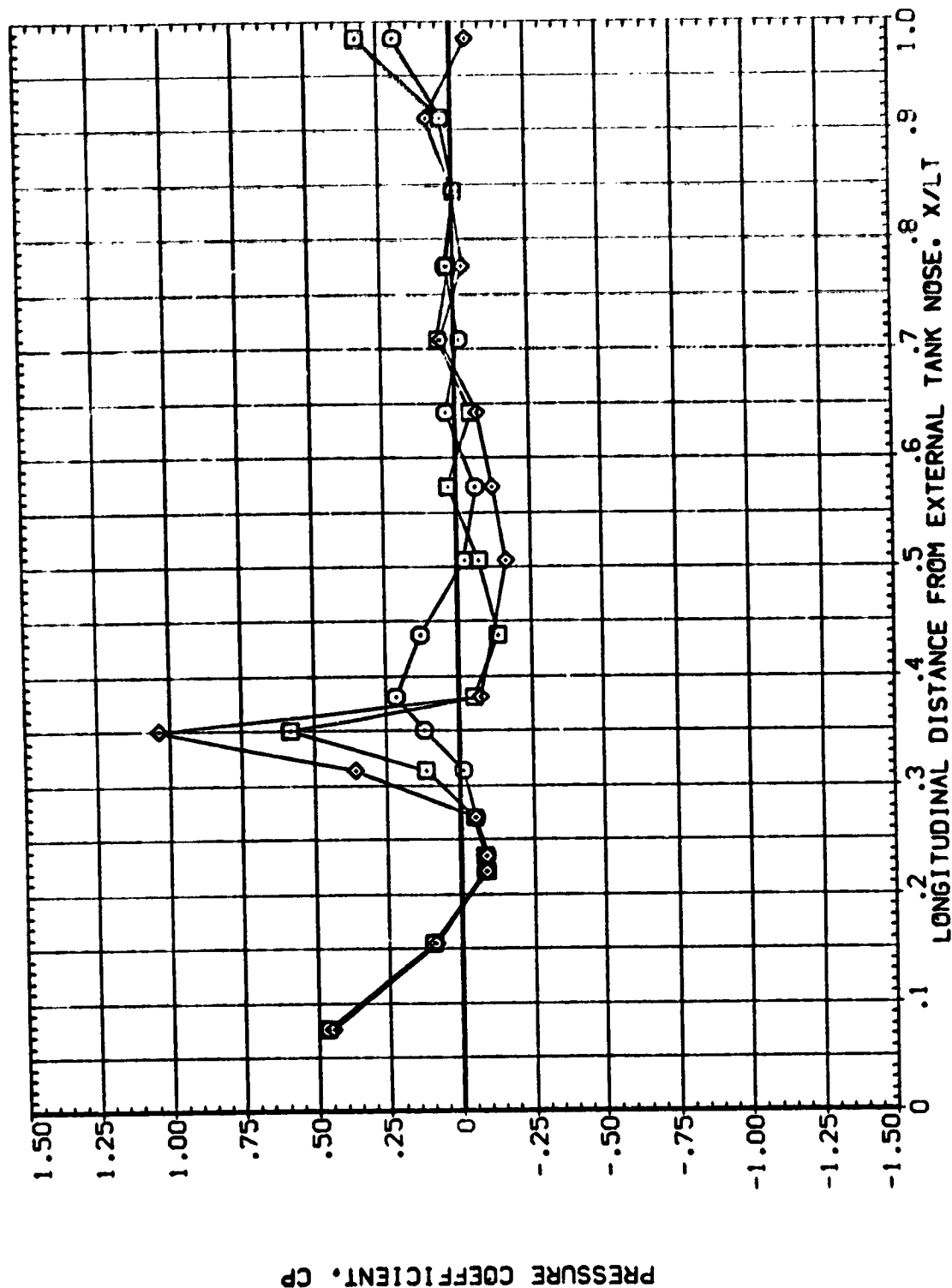


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

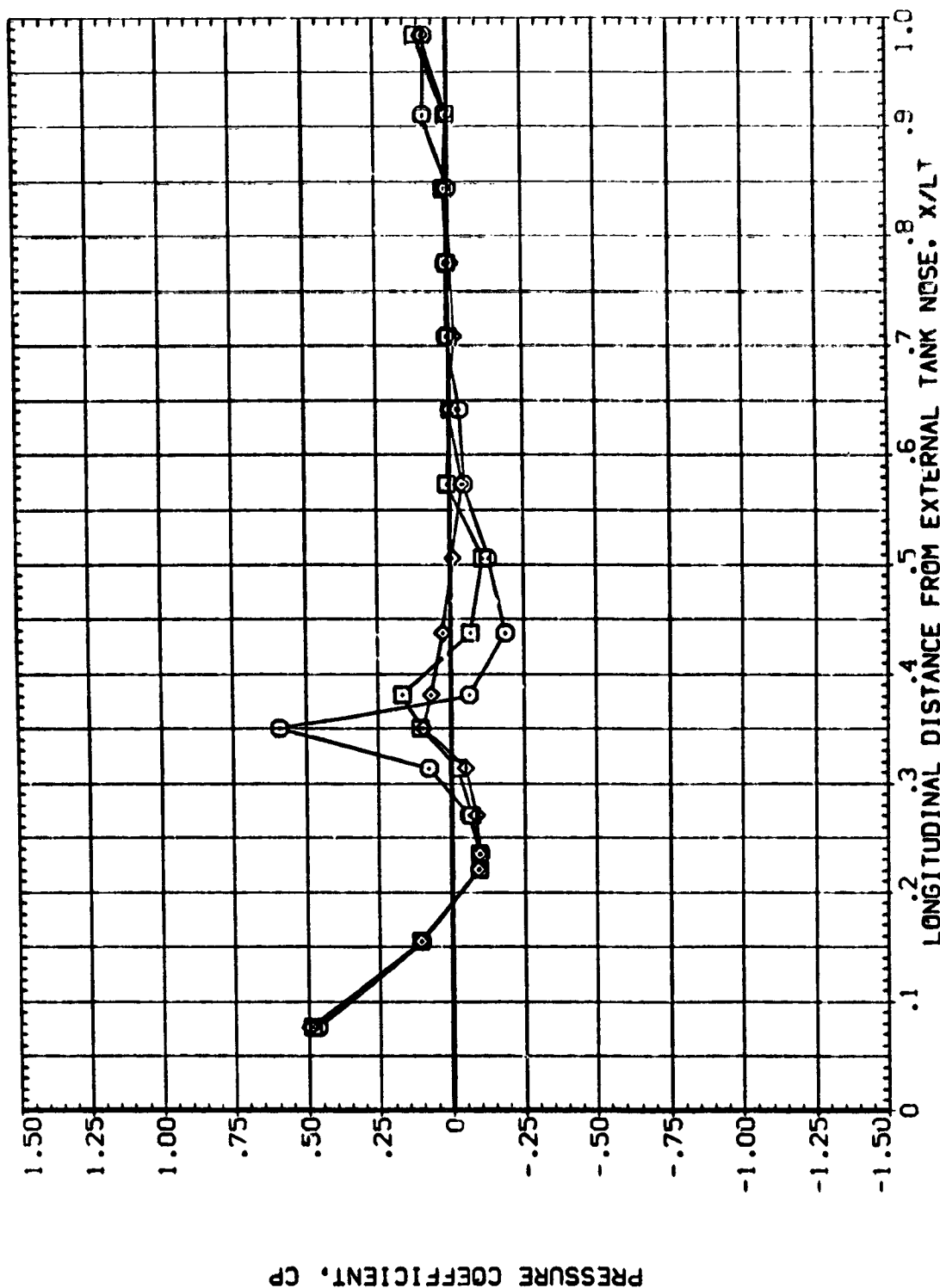
SYMBOL	REFERENCE DATA		PARAMETRIC VALUES	
	PHI	BETA	MACH	CONF 15
○	54.000	.000	1.960	.000
□	72.000	.000	1.960	.140
◇	90.000	.000	1.960	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA							PARAMETRIC VALUES												
	108.000	126.000	.000	1.960	SREF	LREF	BREF	XPRP	YPRP	ZPRP	6.198	5.313	5.313	2.549	.000	.000	ALPHA	CONF 15	RUDER	D991VC	90.000	10.0	5.00	
○																								
□																								
◇																								



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
◇  
□  
○

PHI  
162.000  
180.000  
198.000

BETA  
.000

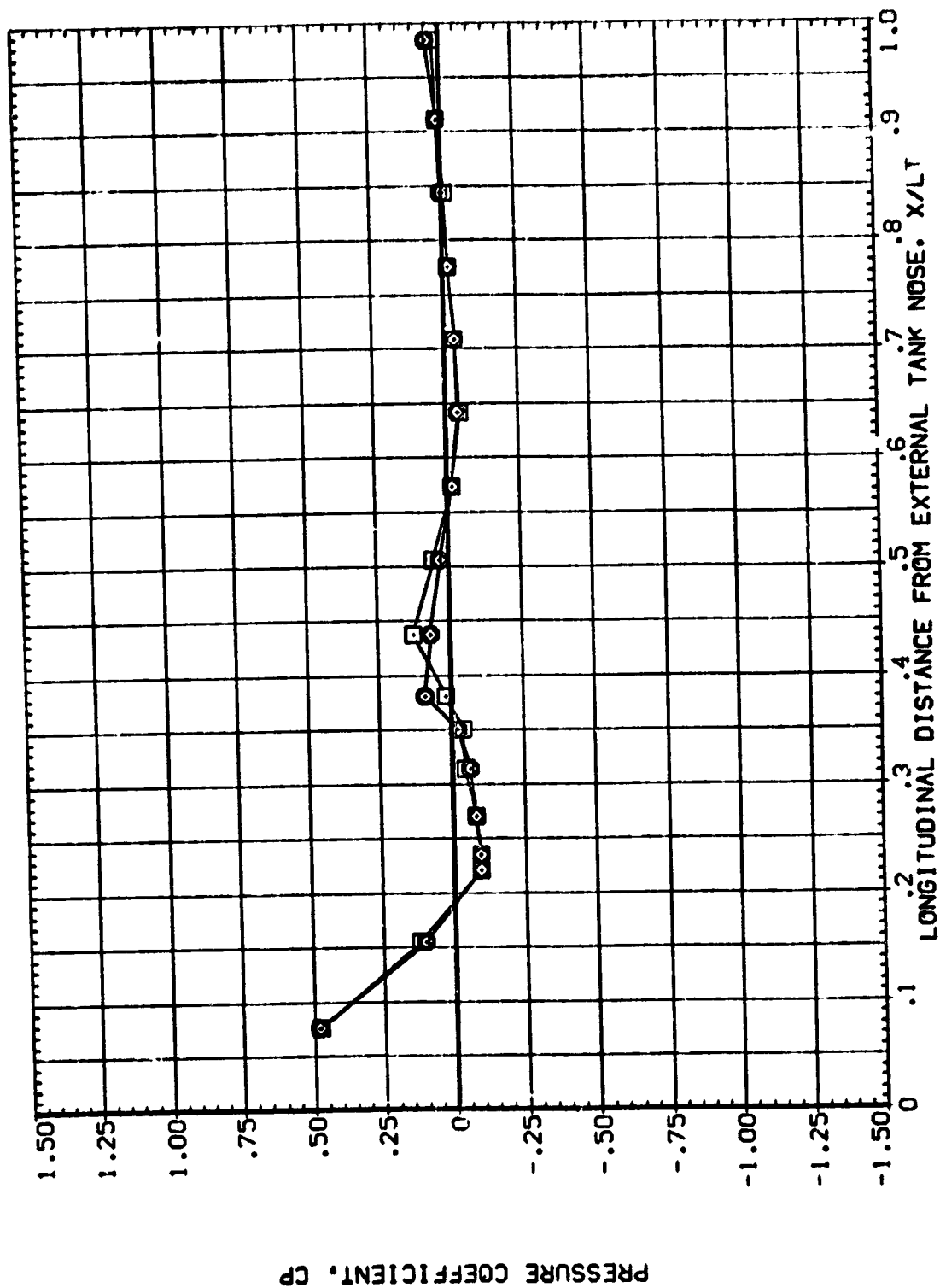
MACH  
1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000 CONF IG  
.140 RUDDER  
.000 ORB INC  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 216.000  
 234.000  
 252.000

BETA  
 .000

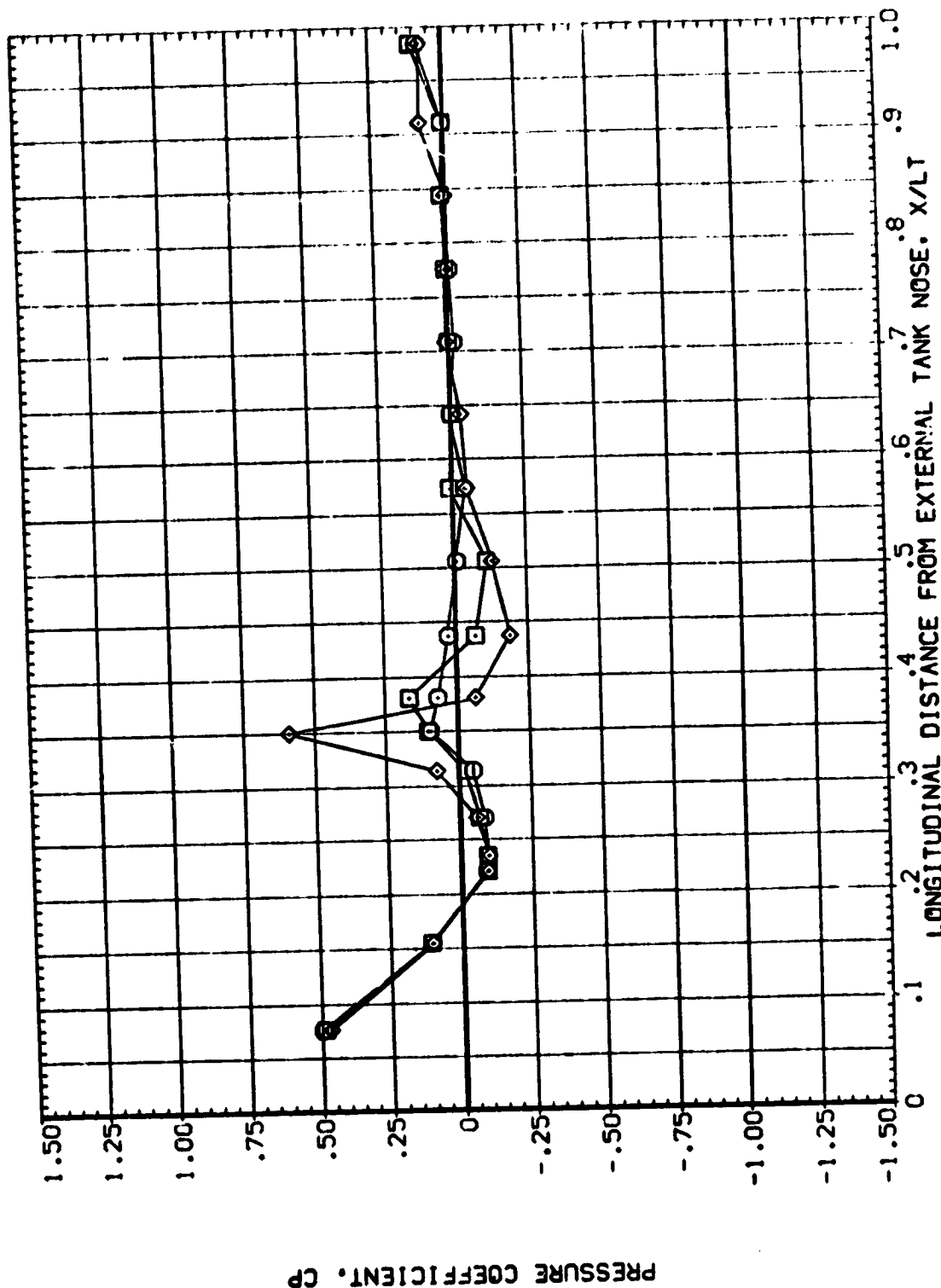
MACH  
 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

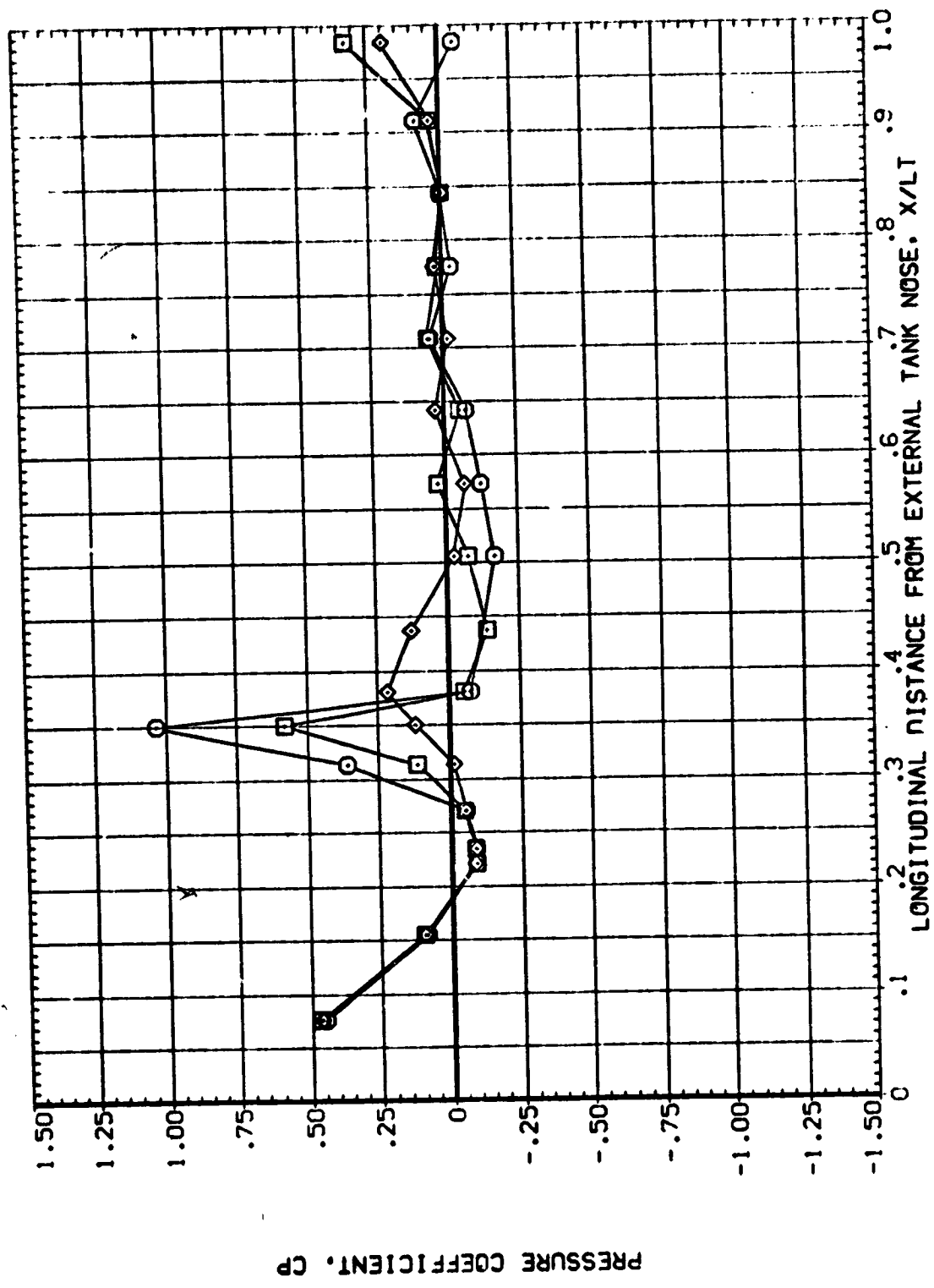
PARAMETRIC VALUES  
 .000  
 .140  
 .000  
 .000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

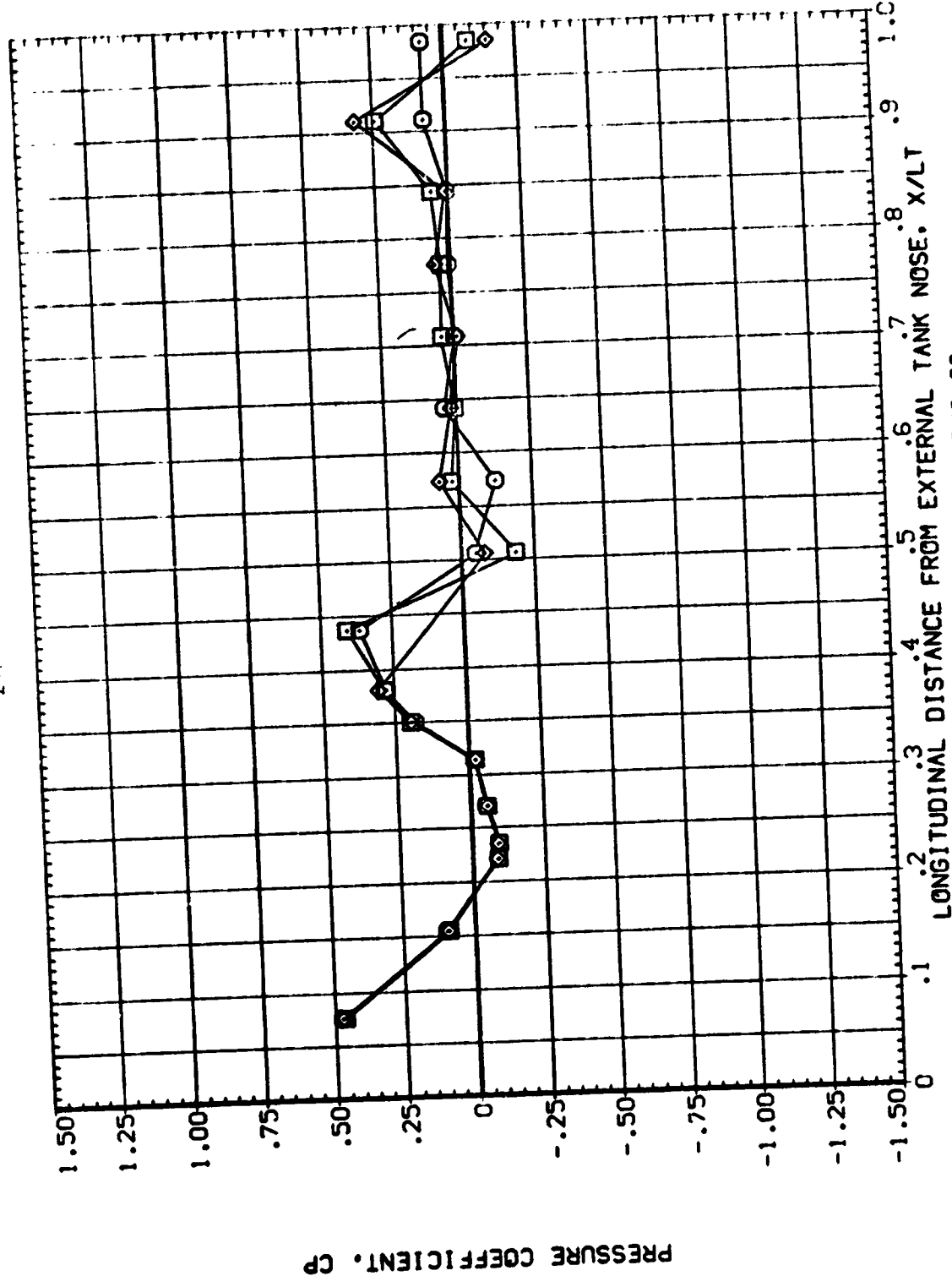
SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	PHI	BETA	MACH	ALPHA	CONFIG	90.000
○	270.000	.000	1.960	DELTA Z	ROD	.000
□	288.000			X-SRB	ORBIT	.500
◇	306.000					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	324.000	342.000	.000	1.960	SREF	LREF	BREF	VMRP	SD, IN.	ALPHA	CONFIS	R-ODER
◇	360.000				6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□								.000	IN.	X-SRB	.140	.000
○								.000	IN.			
△								.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

**SYMBOL**

PHI  
18.000  
36.000

BETA 8.000 MACH 1.960

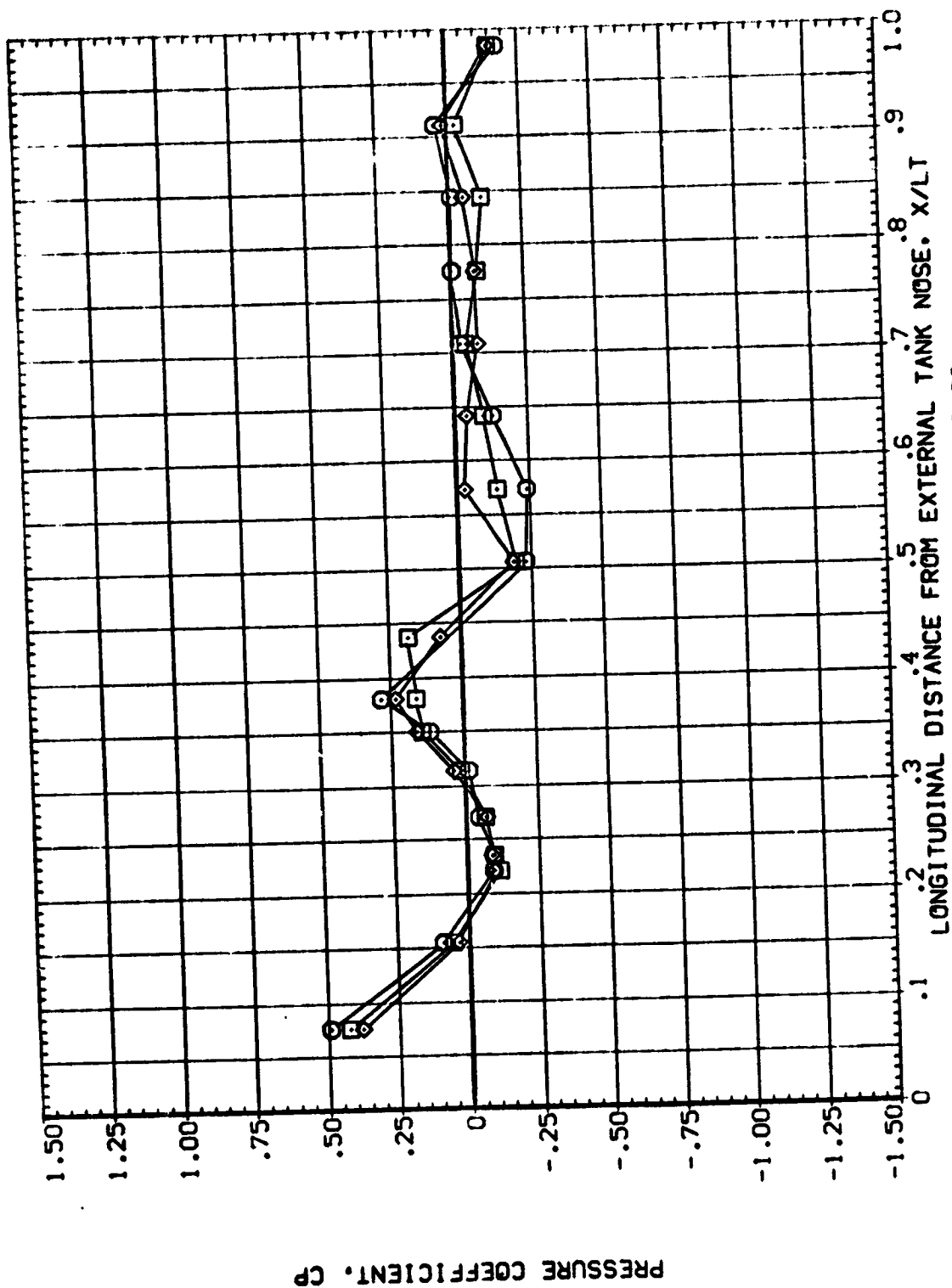
REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMPP	2.549
YMRP	.000
ZMRP	.000

$\dot{z}$   
 $g \dot{z} \dot{z} \dot{z} \dot{z} \dot{z}$

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES

CONFIS	.000	90.000
RUDER	.140	.000
CRABING	.000	.500



LONGITUDINAL DISTANCE

PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

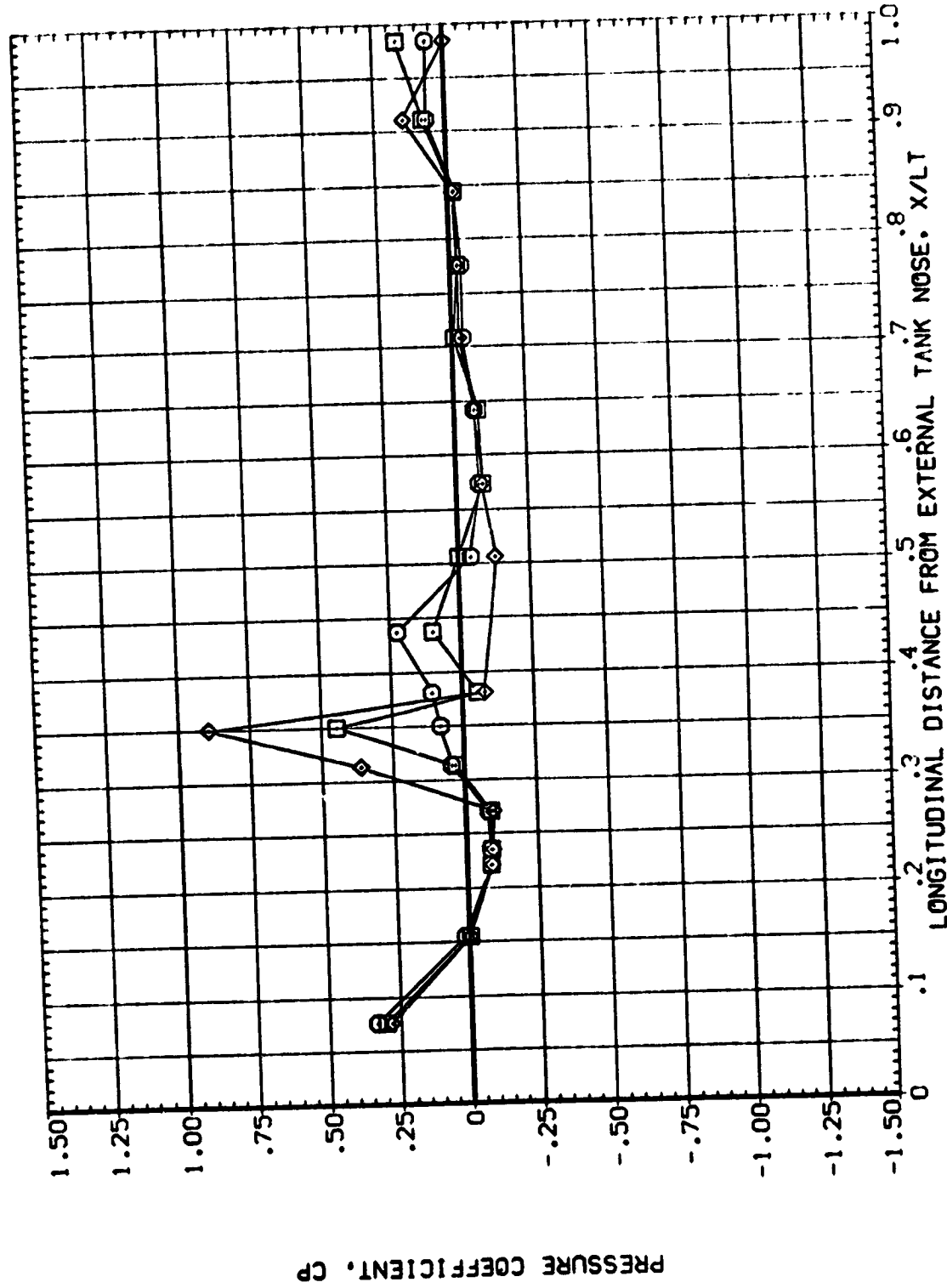
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

PHI  
54.000  
72.000  
90.000

BETA 8.000 MACH 1.960

REFERENCE DATA  
SREF 6.198 SO. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

PARAMETRIC VALUES  
CONF IG .000  
RUDDER .140  
ORBITING .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
○  
□  
◇

PHI  
108.000  
126.000  
144.000

BETA  
8.000

MACH  
1.960

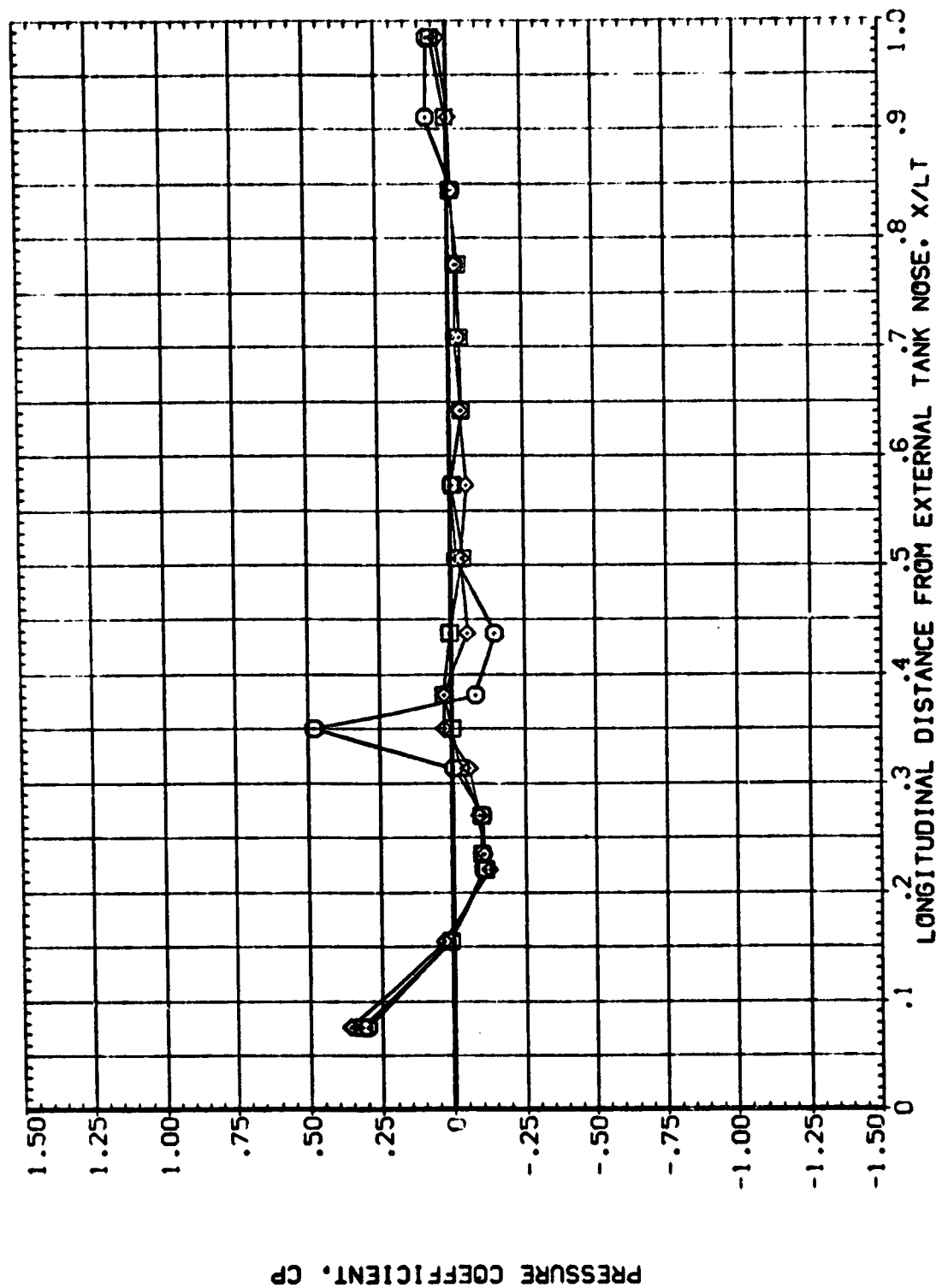
REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SQ. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000  
.140  
.000  
.000

CONF IG  
RUDDER  
ORB INC  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○ □ ◇

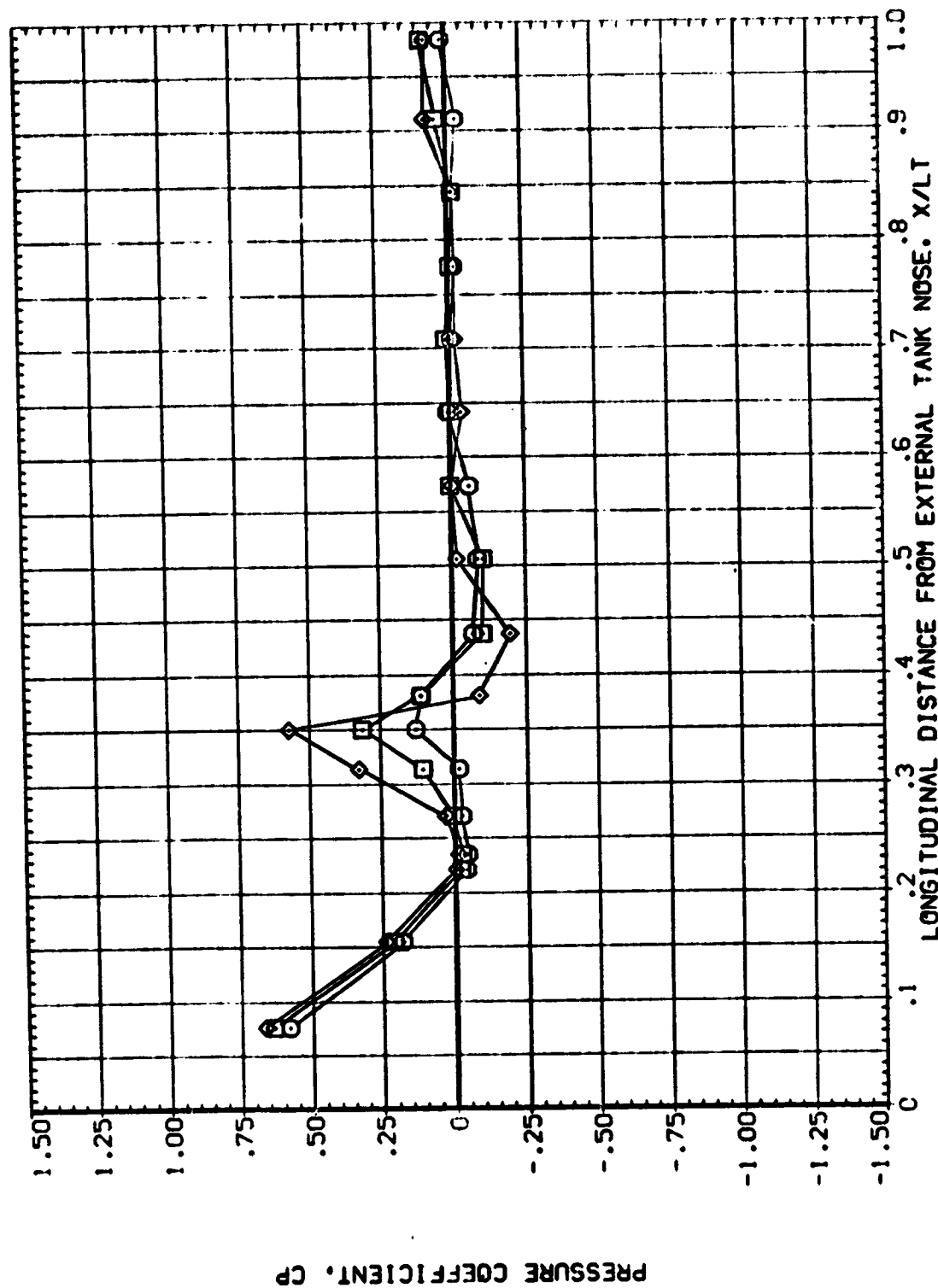
PHI  
 216.000  
 234.000  
 252.000

BETA MACH  
 8.000 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

ALPHA  
 DELTAZ  
 X-SRB

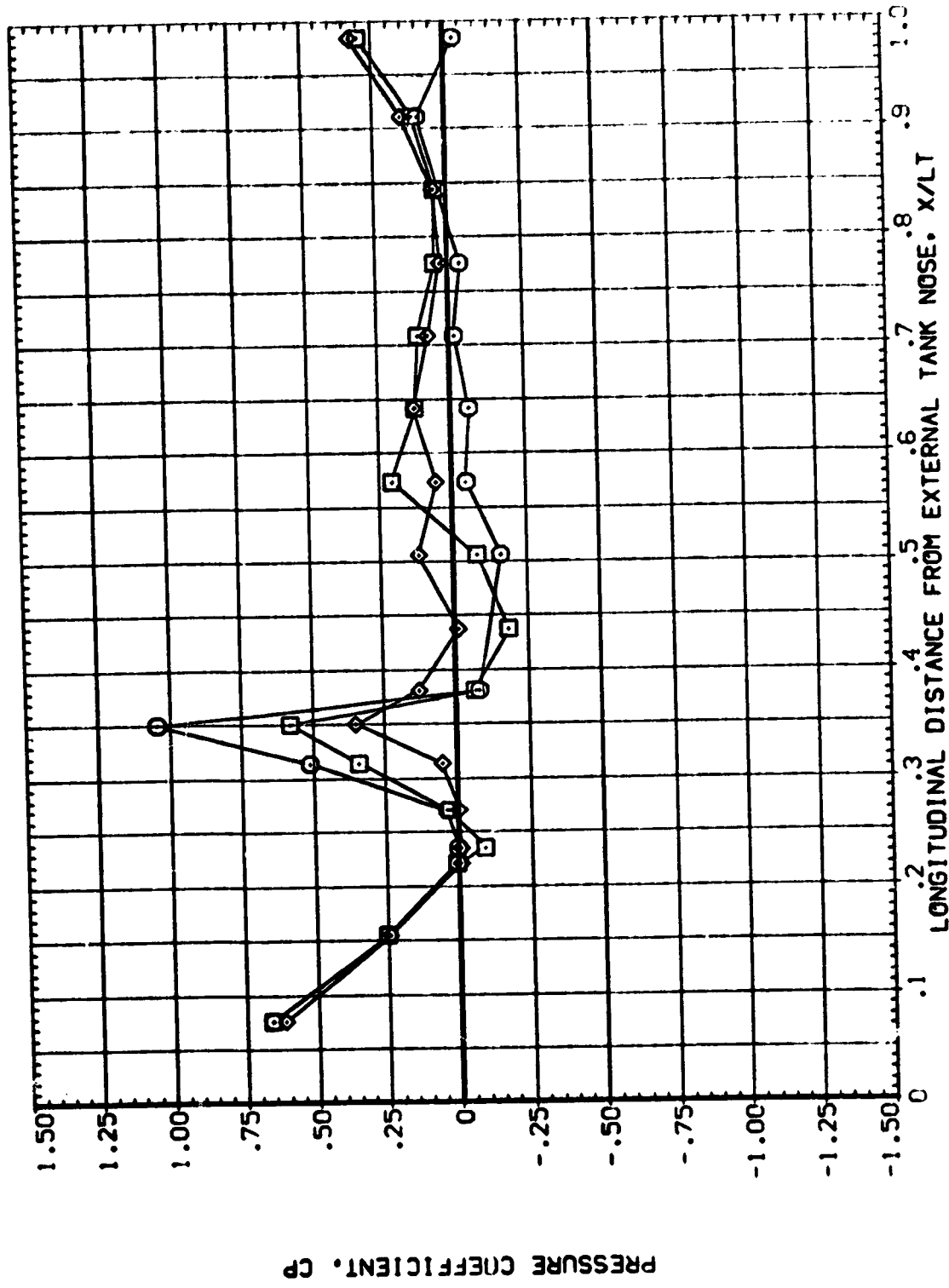
PARAMETRIC VALUES  
 .000 CONF16 90.000  
 .140 RUDDER .000  
 .000 ORBINC .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

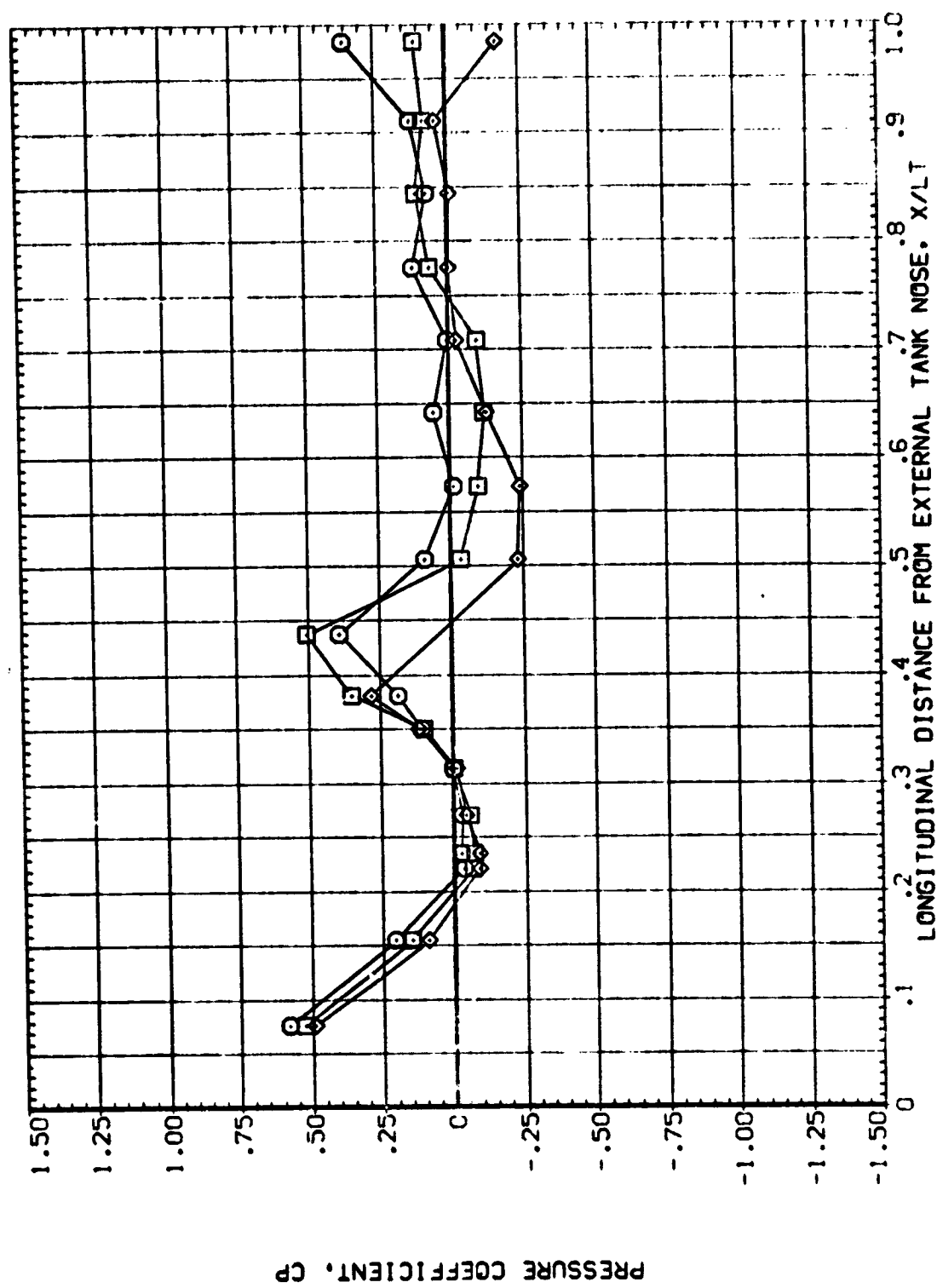
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
				SREF	6.198	SO. IN.	DELTAZ	.000	CONF1G
◇	270.000	8.000	1.960	LREF	5.313	IN.	X-S98	.140	RUDER
□	288.000			BREF	2.549	IN.		.000	DRBINC
◇	306.000			XMRP	.000	IN.		.500	
				YMRP					
				ZMRP					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

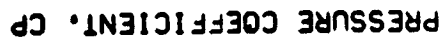
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONFIS	RODOR
○	324.000	8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.140
□	342.000							IN.	X-SRB	.000	.000
◇	360.000							IN.		.000	.500
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03

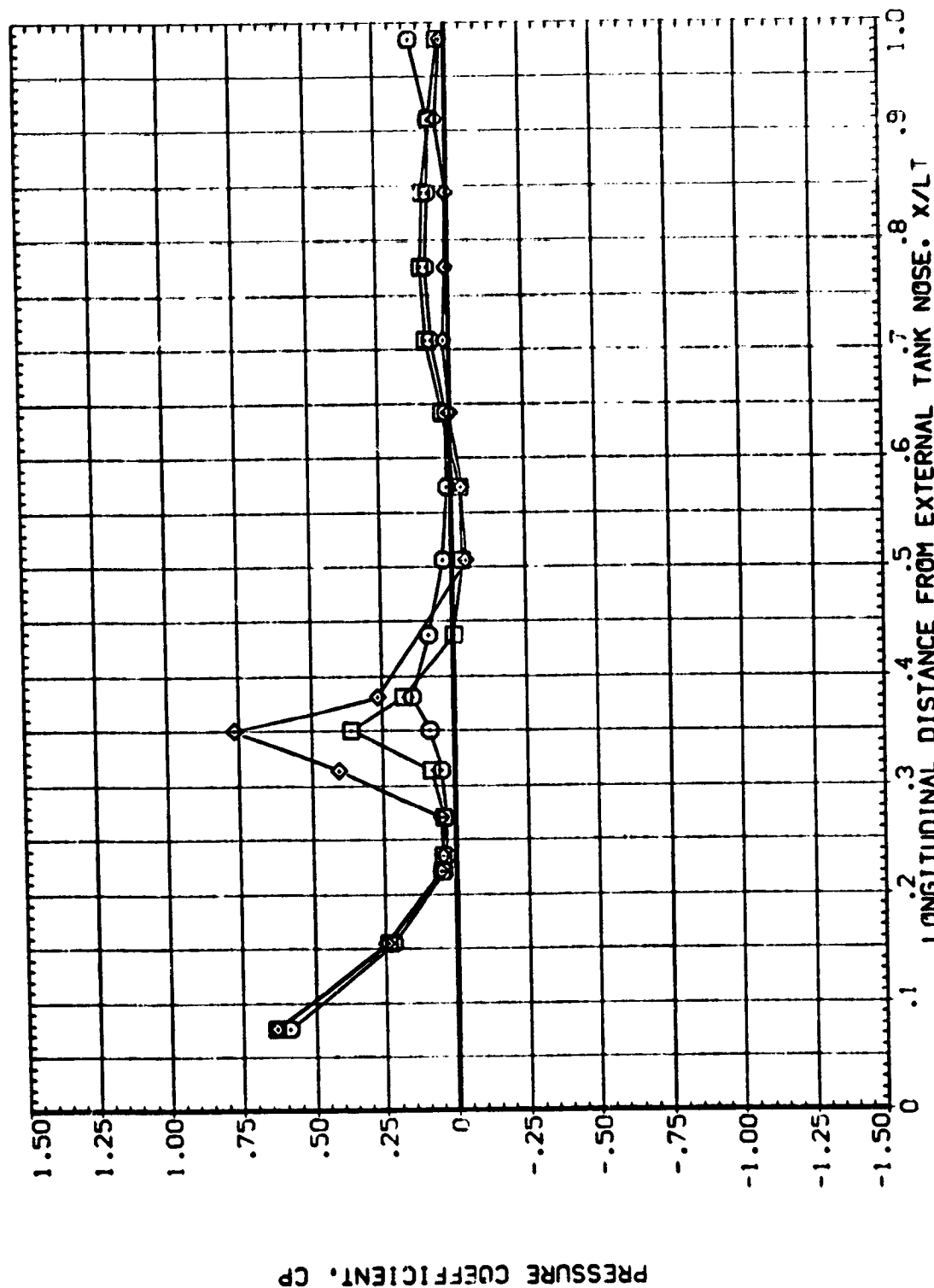
005.  
000.  
000.



045318

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

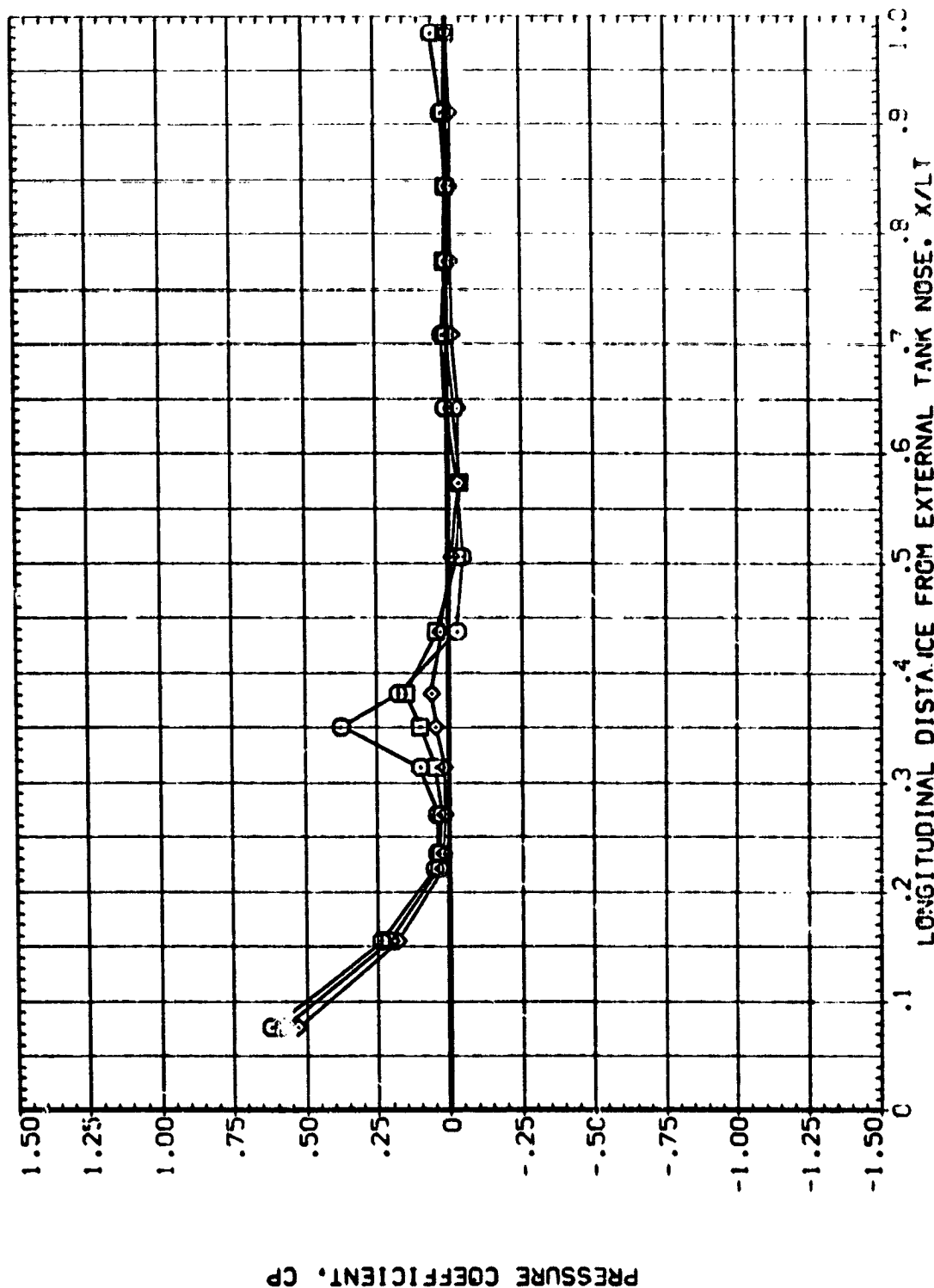
SYMBOL	PMI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SO. IN.	ALPHA	CONFIS	SO. IN.
◇	54.000	-8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
□	72.000							IN.	X-SRB	ORBIT INC	.500
◇	90.000							IN.			
◇								IN.			
◇								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000	144.000	-8.000	3.500		SREF	LREF	BREF	XMRP	ZMRP	50. IN.	ALPHA	CONF IS
□							6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	.000
◇												IN.	R-598	.140
◇												IN.	DRBINC	.500



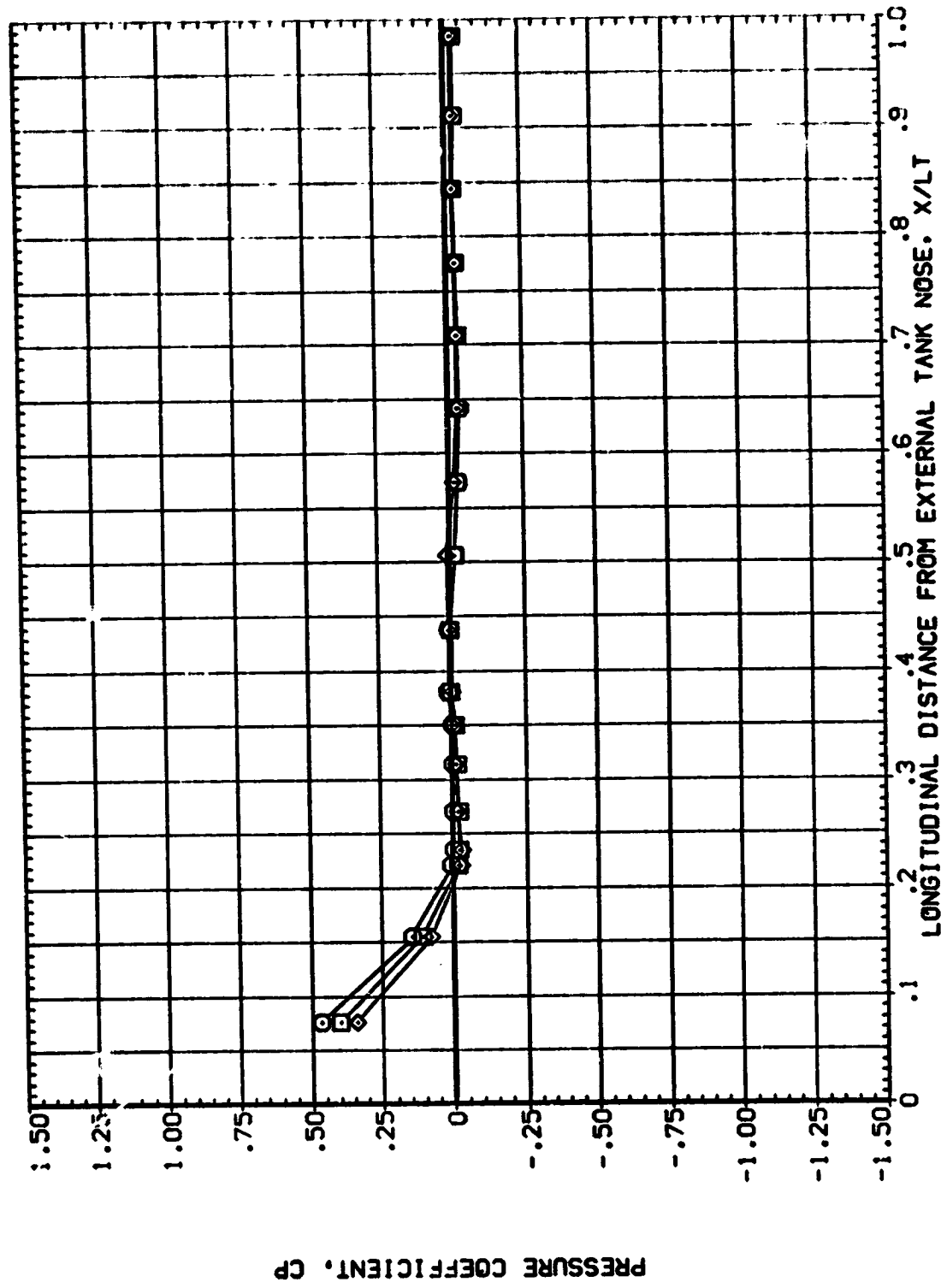
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

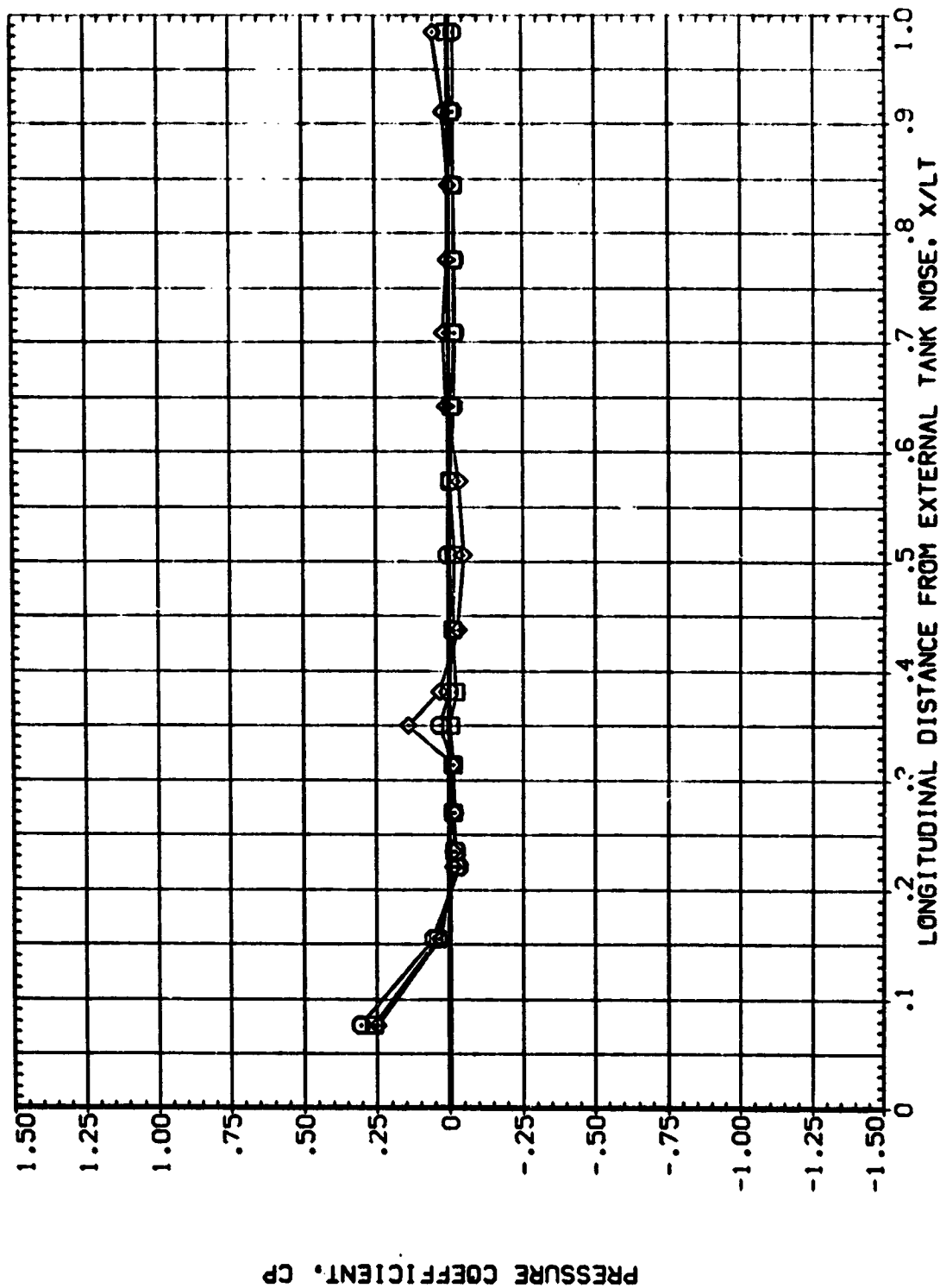
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SO. IN.	ALPHA	CONF IG	
○	162.000	-8.000	3.500	5.313	IN.	DELTA Z	.000	RUDER
□	180.000			5.313	IN.	X-SRB	.140	.000
◇	198.000			2.549	IN.		.000	OSBINC
				.000	IN.			.500
				ZMRP				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A821C2)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LINEF	BREF	XMRP	SO. IN.	ALPHA	CONFIS	90.000
○	216.000	-8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTAZ	.000	.000
□	234.000							IN.	X-SRB	.000	.500
◇	252.000							IN.		.000	.500

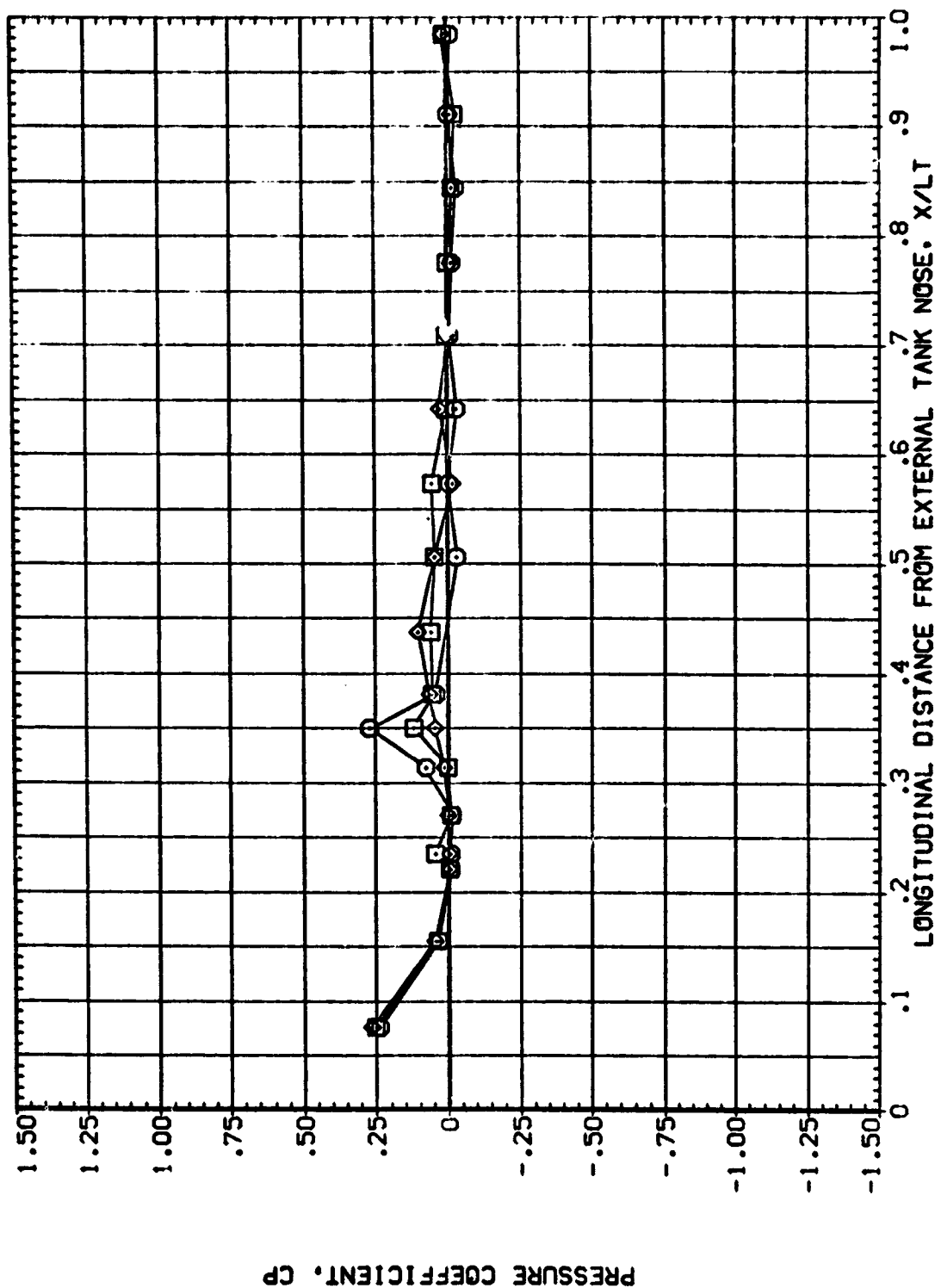


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

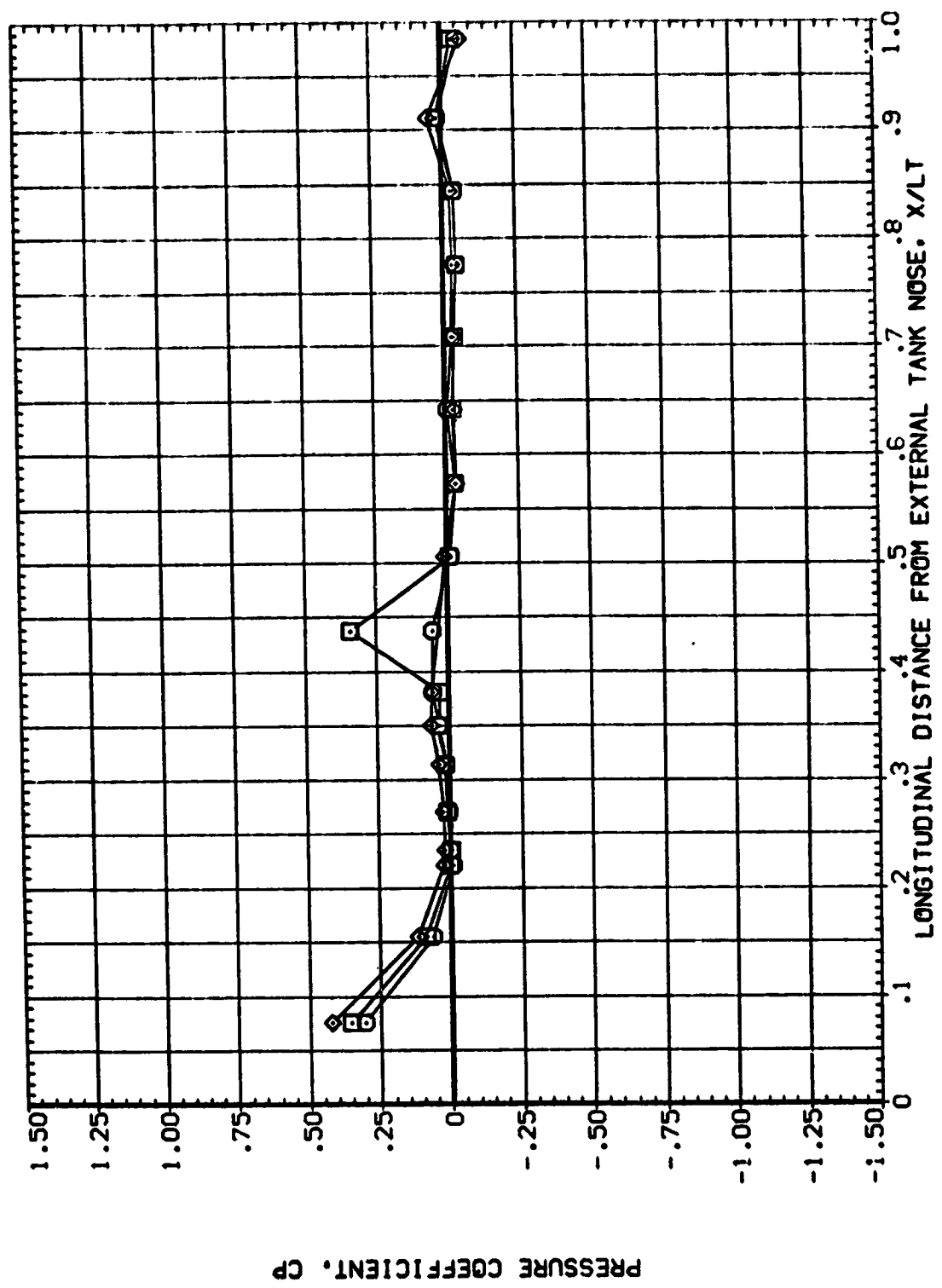
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	XREF	ZREF	ALPHA	CONF IG	ORBIT	
○	270.000	-8.000	3.500	5.198	5.313	5.313	2.549	DELTA Z	.000	RUDER	.000
□	288.000							X-SRB	.140		.000
◇	306.000									ORBIT	.500



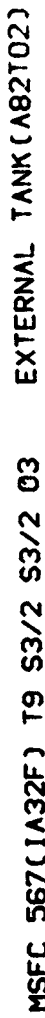
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL		PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
◇	324.000	-8.000	3.500	SREF	6.198	SQ. IN.	IN.	CONF IG	.000	DELTA Z	.140	RUDDER	.000
	342.000												
	360.000												
◇		-8.000	3.500	LREF	5.313	IN.	IN.	CONF IG	.000	DELTA Z	.140	RUDDER	.000
◇		-8.000	3.500	BREF	5.313	IN.	IN.	CONF IG	.000	DELTA Z	.140	RUDDER	.000
◇		-8.000	3.500	XREF	2.549	IN.	IN.	CONF IG	.000	DELTA Z	.140	RUDDER	.000
◇		-8.000	3.500	YREF	.000	IN.	IN.	CONF IG	.000	DELTA Z	.140	RUDDER	.000
◇		-8.000	3.500	ZREF	.000	IN.	IN.	CONF IG	.000	DELTA Z	.140	RUDDER	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03

**SYMBOL**

**PHI**  
**.000**  
**18.000**  
**36.000**

BETA	MACH
.000	3.50

**MACH**  
**3.500**

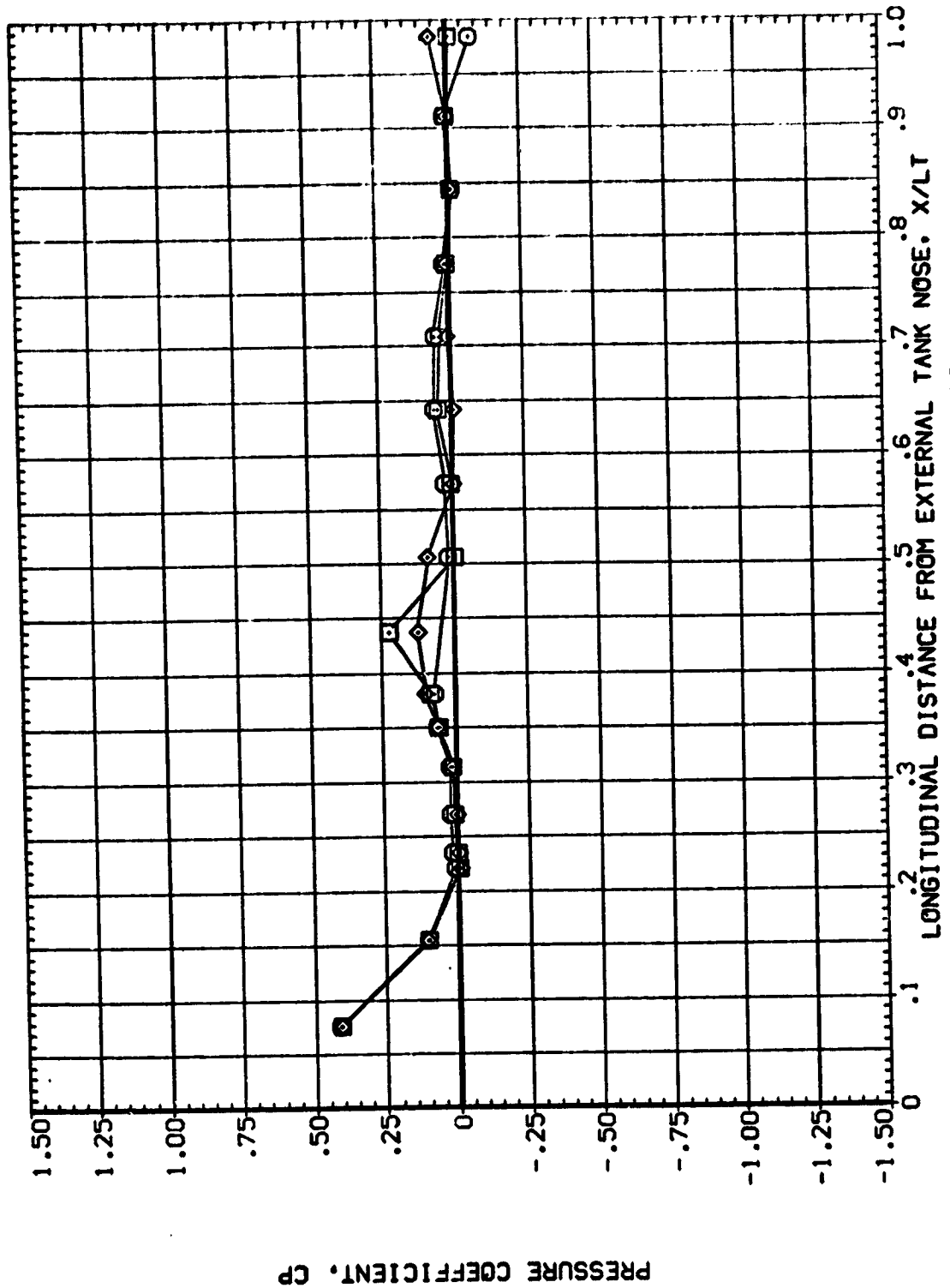
### PARAMETRIC VALUES

0001.06  
000.000  
005.500

ALPHA  
DELTA Z  
X-SRB

**ᐃᓴᐅᐅᐅᐅᐅᐅᐅᐅ**

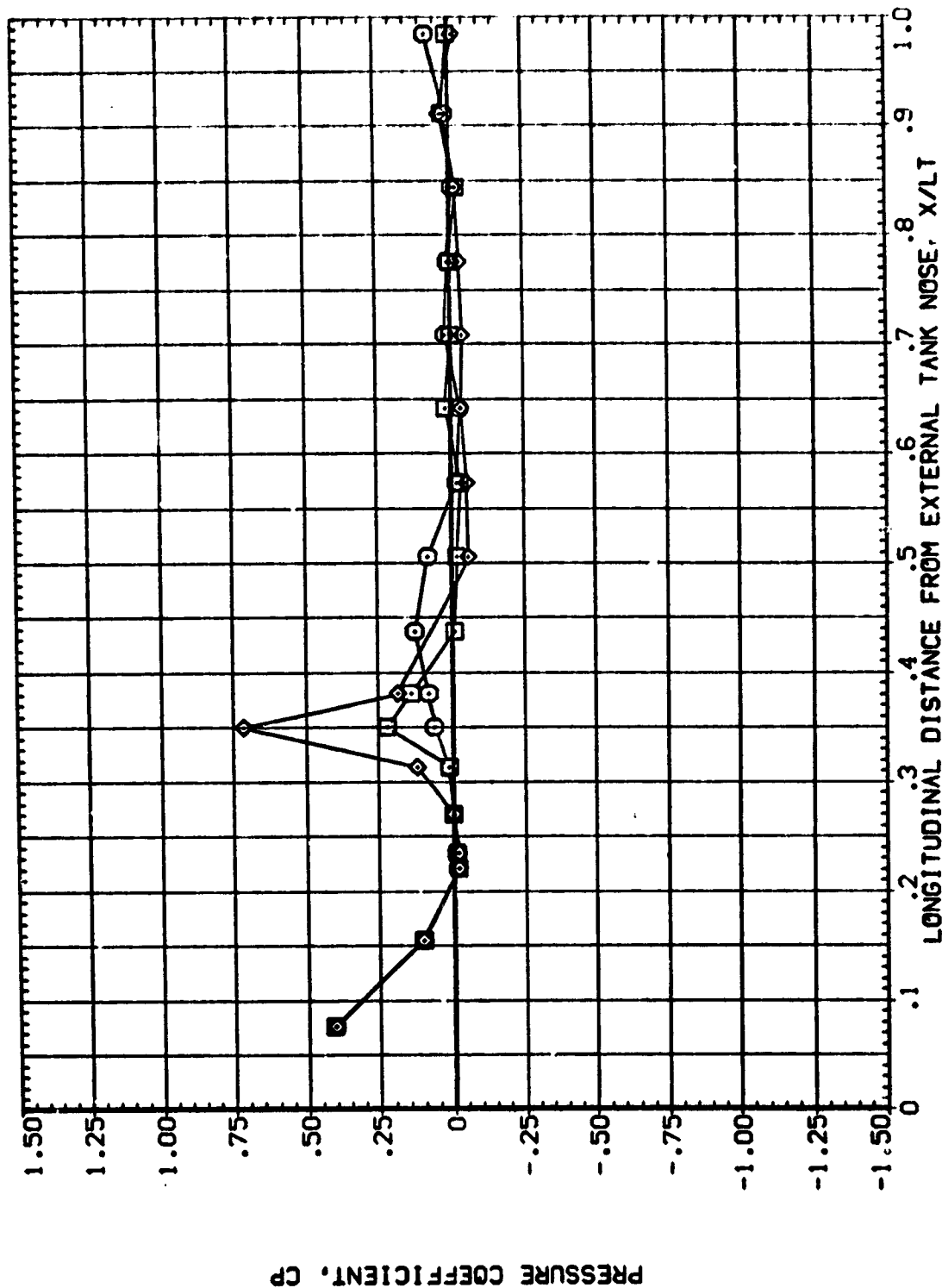
REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000



03 3/2 S3 T9 TANK ON DISTRIBUTION PRESSURE

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

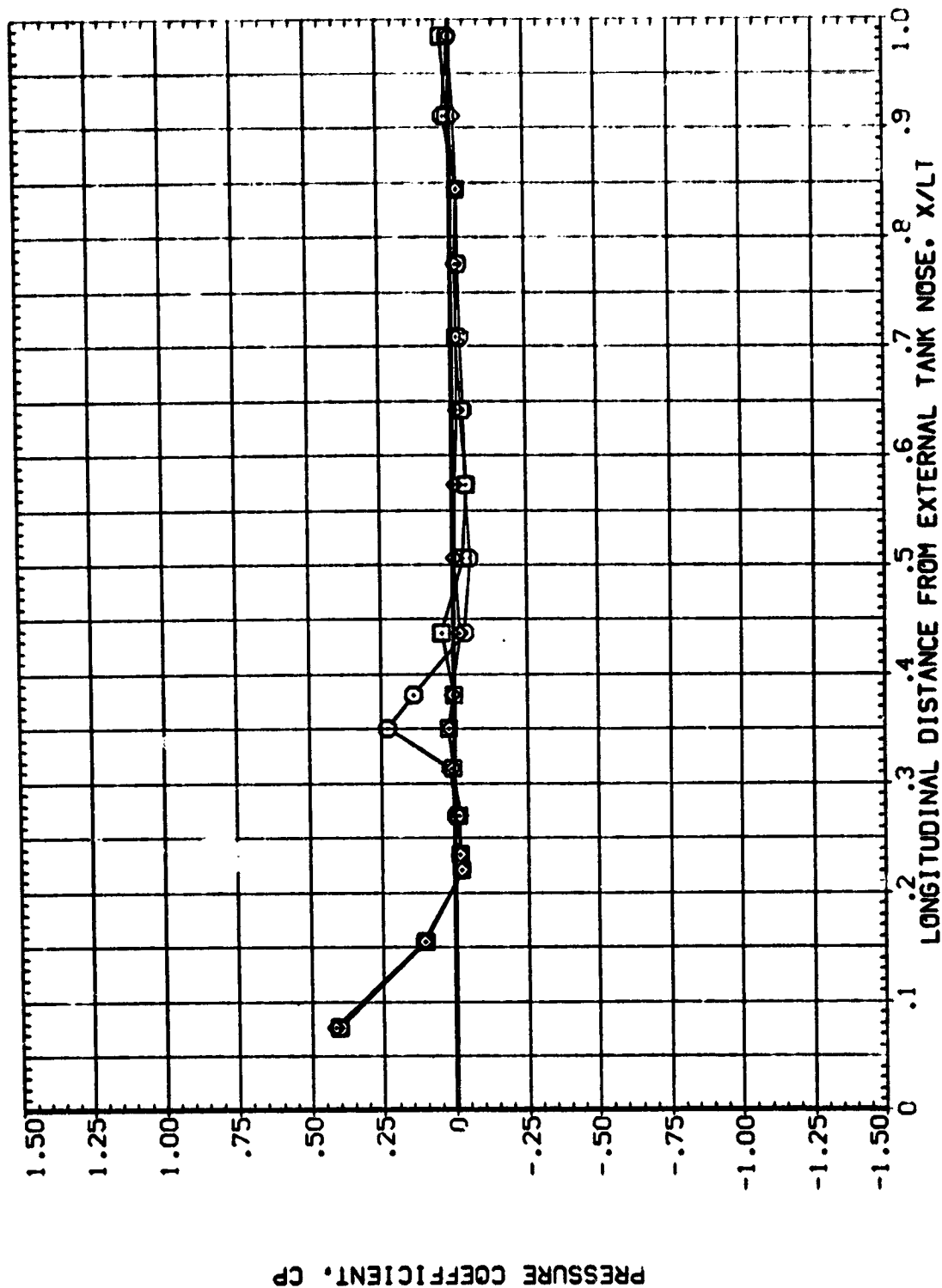
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○	54.000	.000	3.500	SREF 6.198	.000 CONF 16
□	72.000			LREF 5.313	.140 RUDDER
◇	90.000			BREF 5.313	.000 ORB INC
				XREF 2.548	
				YREF .000	
				ZREF .000	
					5.0



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

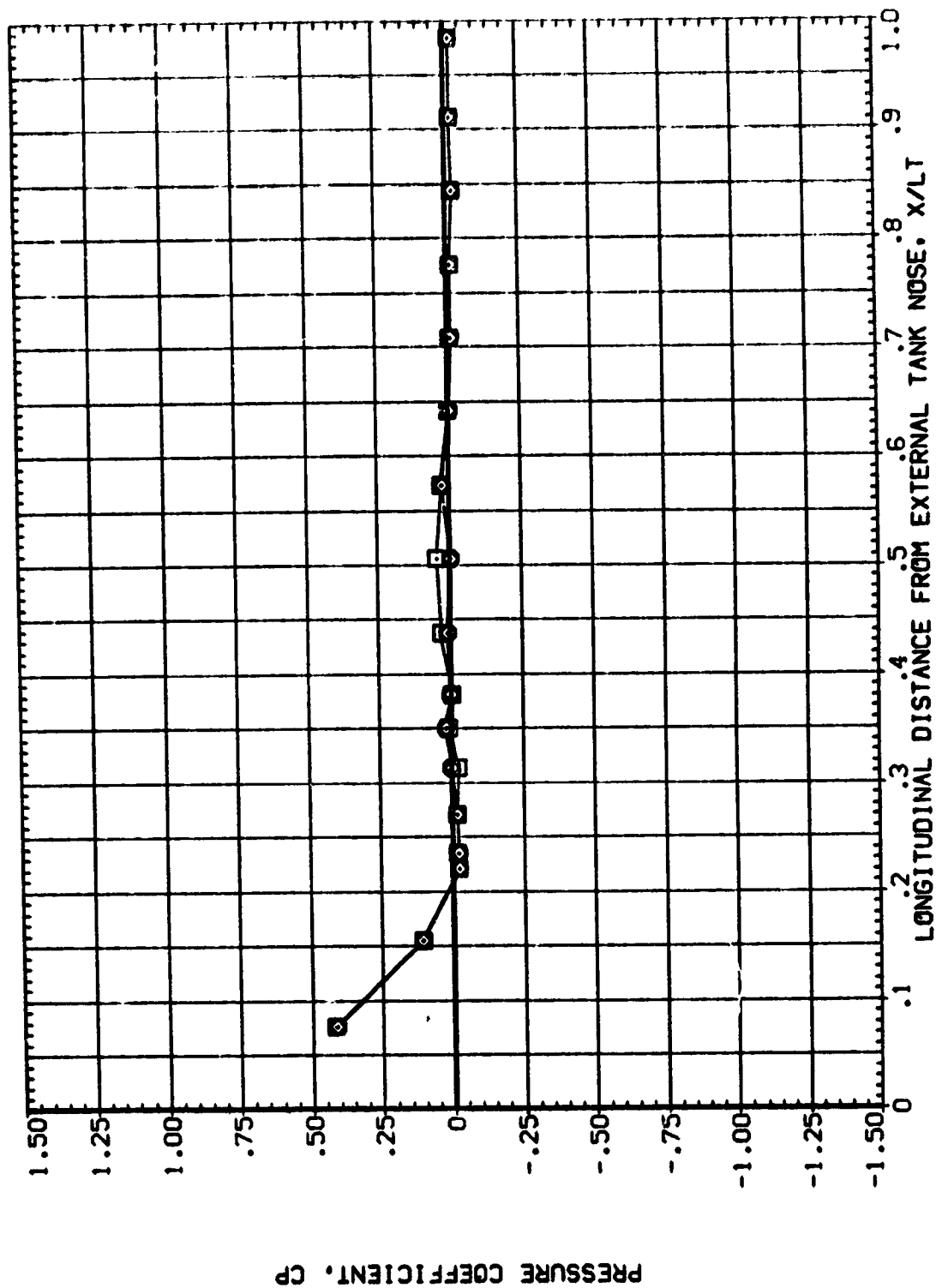
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○	108.000	.000	3.500	SREF 6.198	.000 CONF1G
□	126.000			LREF 5.313	.140 RUDDER
◇	144.000			BREF 5.313	.000 CRG1NC
				XMRP 2.549	
				YMRP .000	
				ZMRP .000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ALPHA	CONF IG	CONF IG	CONF IG
○	162.000	.000	3.500	6.198	5.313	5.313	2.549	DELTA Z	.000	RUDER	.000
□	180.000							X-SRB	.000	ORBIT INC	.500
◇	198.000										

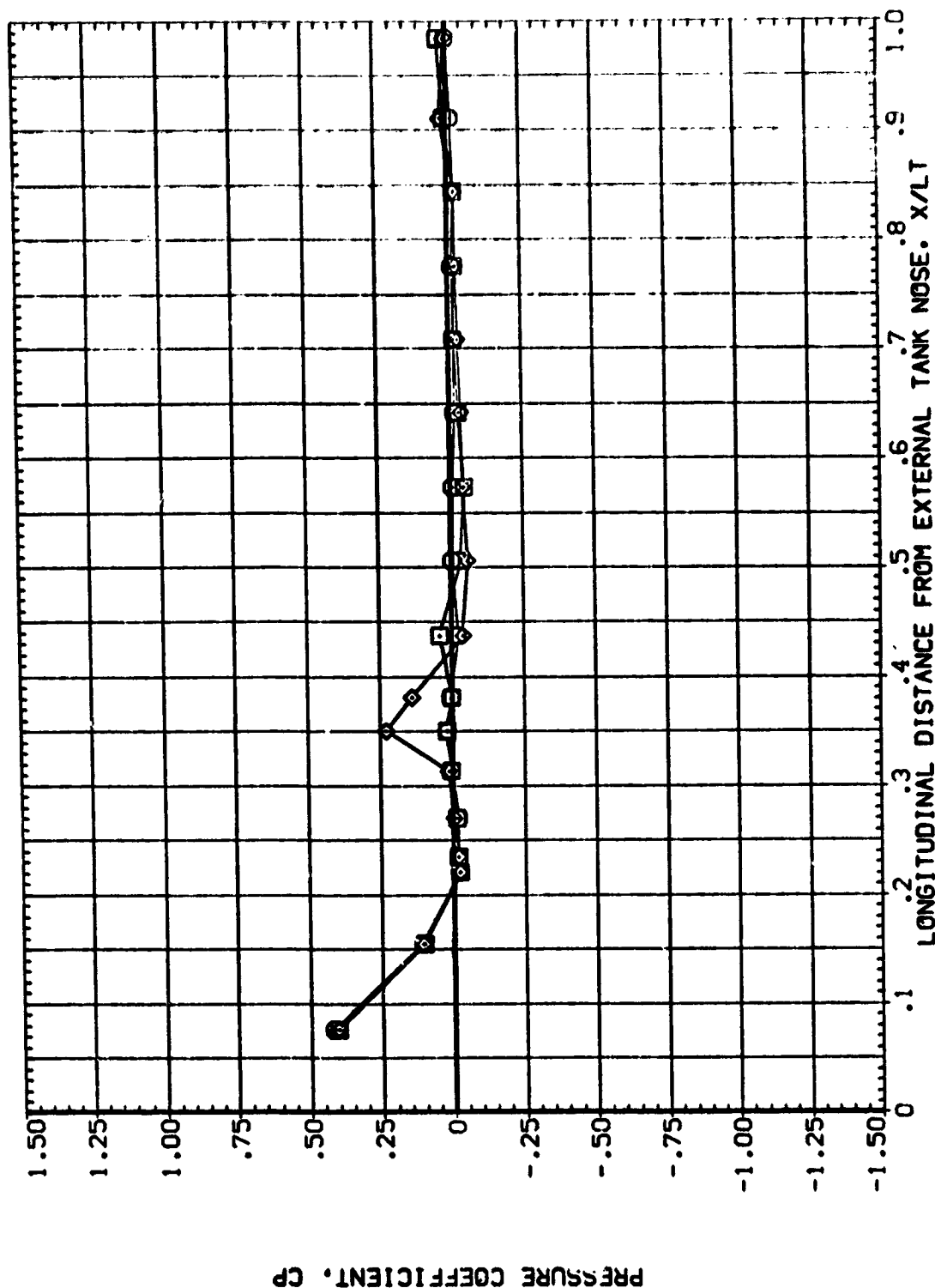


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

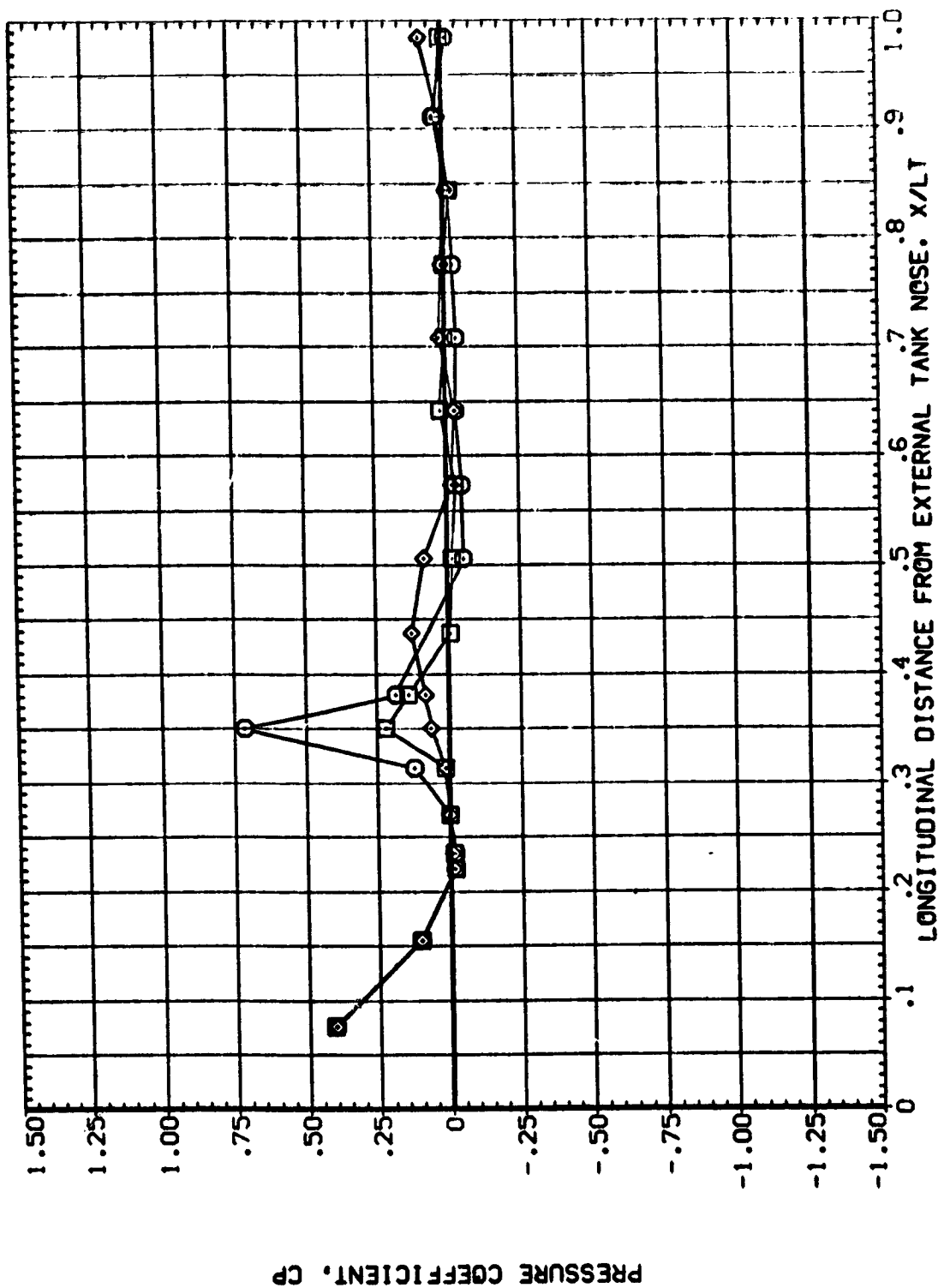
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				SREF	LREF	BREF	XREF	ALPHA	CONFIS	RUDDER	ORBITAL
○	216.000	.000	3.500	5.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	234.000							X-SRB	.000	.000	.500
◇	252.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	270.000	288.000			SREF	LREF	BREF	XMRP	YMRP	ZMRP	CONF IG	CONF IG
○	270.000	288.000	.000	3.500	6.198	5.313	5.313	2.549	.000	.000	.140	RUDER
◇	306.000										.000	ORBITAL

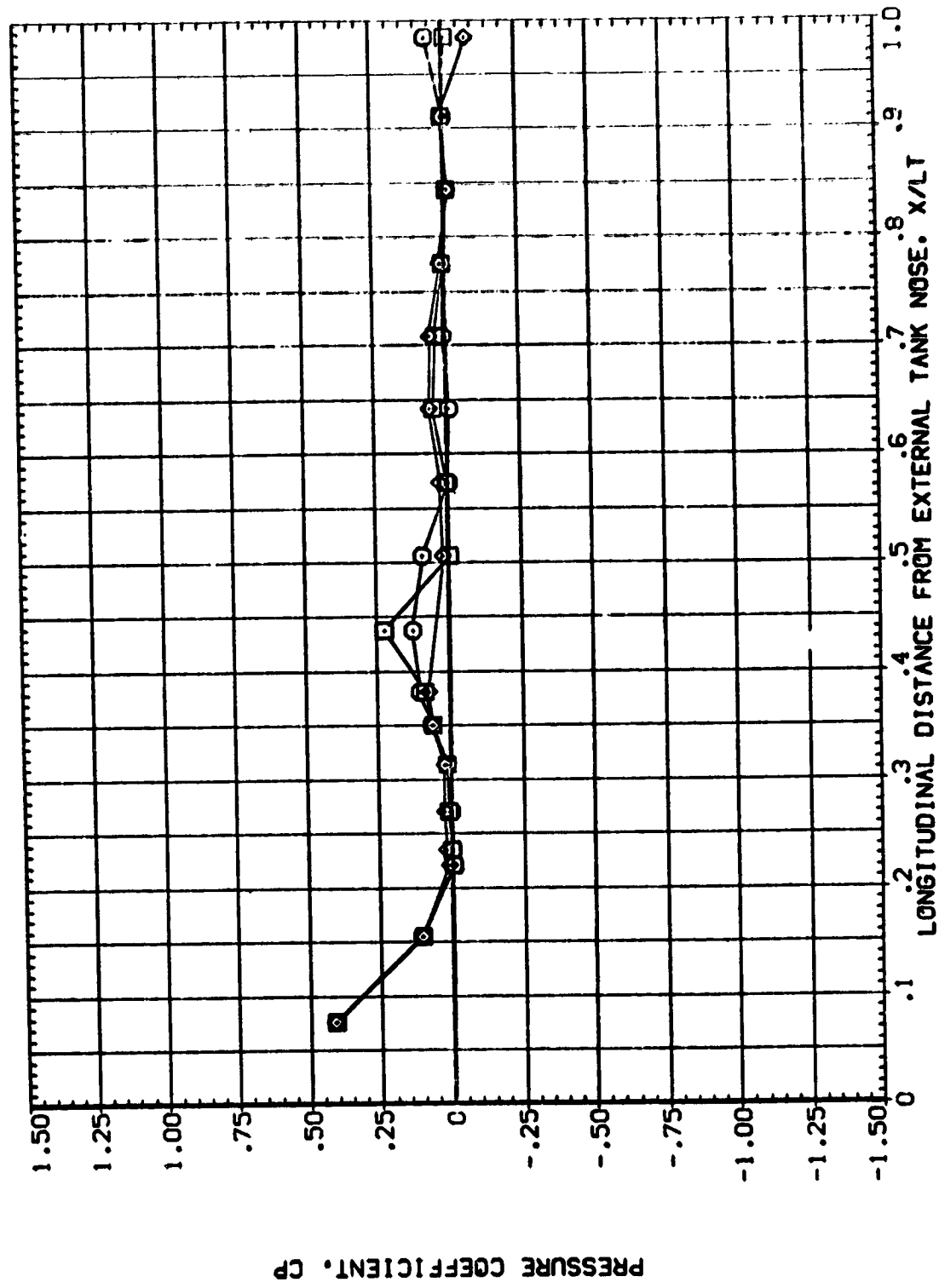


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

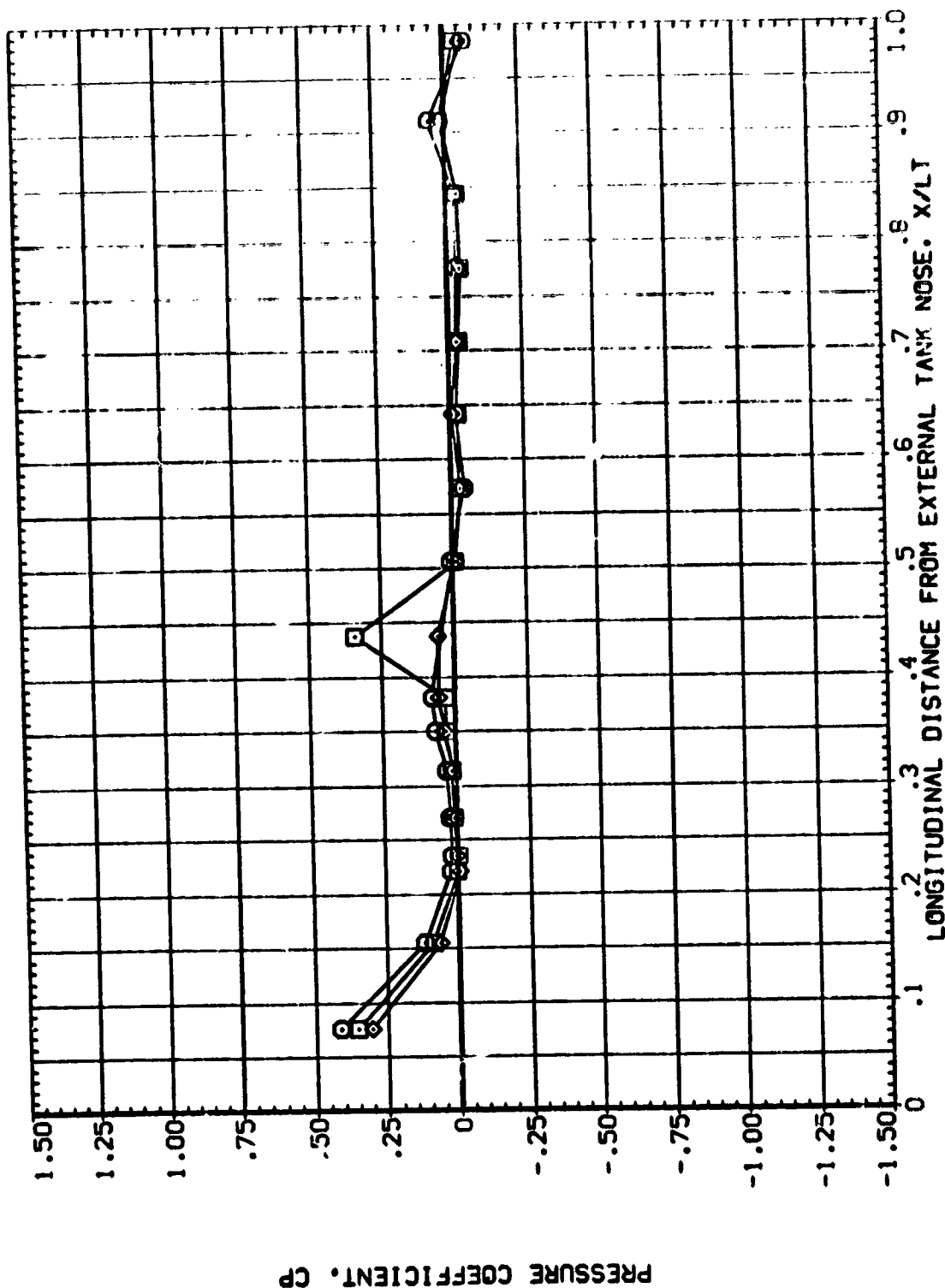
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				SREF	6.198	ALPHA	CONF IG	50.000
□	324.300	.000	3.500	LREF	5.313	DELTA Z	RUDER	.000
◇	342.000			SREF	5.313	X-SRB	.000	.500
	360.000			XTRP	2.549			
				YTRP	.000			
				ZTRP	.000			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 · EXTERNAL TANK (A82T02)

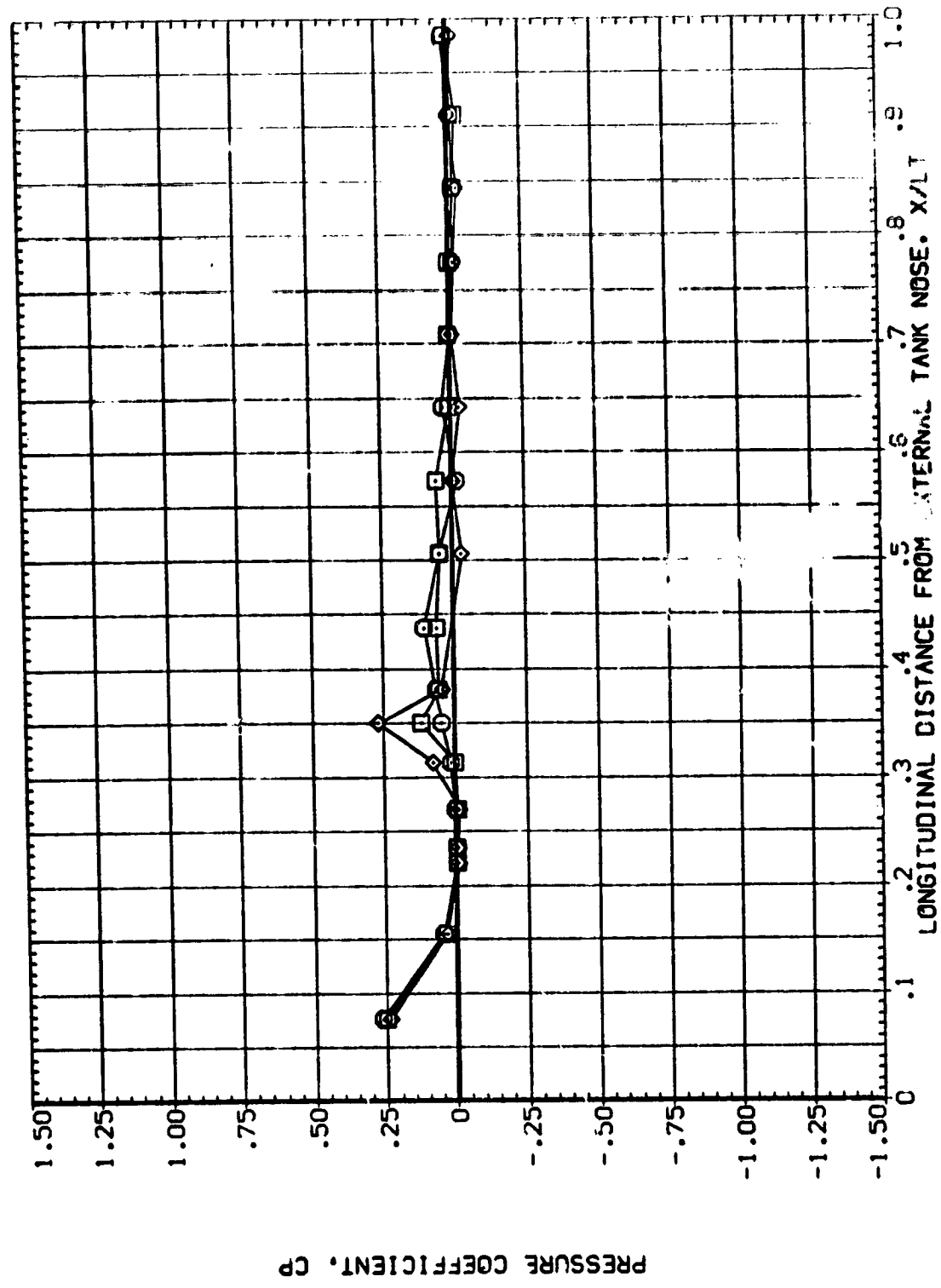
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□					LREF	5.313	IN.	.140	CLCER	.000
◇					BREF	5.313	IN.	.000	DP9INC	.500
					XMRP	2.549	IN.			
					YMRP	.000	IN.			
					ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PHI			BETA		MACH		REFERENCE DATA					PARAMETRIC VALUES			
	54.000	72.000	90.000	8.000	3.500	SREF	LREF	SREF	LREF	SREF	LREF	SREF	CDNF16	CDNF16	RUDDER	DRBTNC
◇						5.313	5.313	6.198	50. IN.	DELTA Z	DELTA Z	DELTA Z	.000	.000	.000	.000
□						2.549	2.549	5.313	50. IN.	X-SUB	X-SUB	X-SUB	.000	.000	.000	.000
◇						.000	.000	.000	.000							.500
◇						ZMRP	ZMRP	ZMRP	ZMRP							



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL

PHI  
108.000  
126.000  
144.000

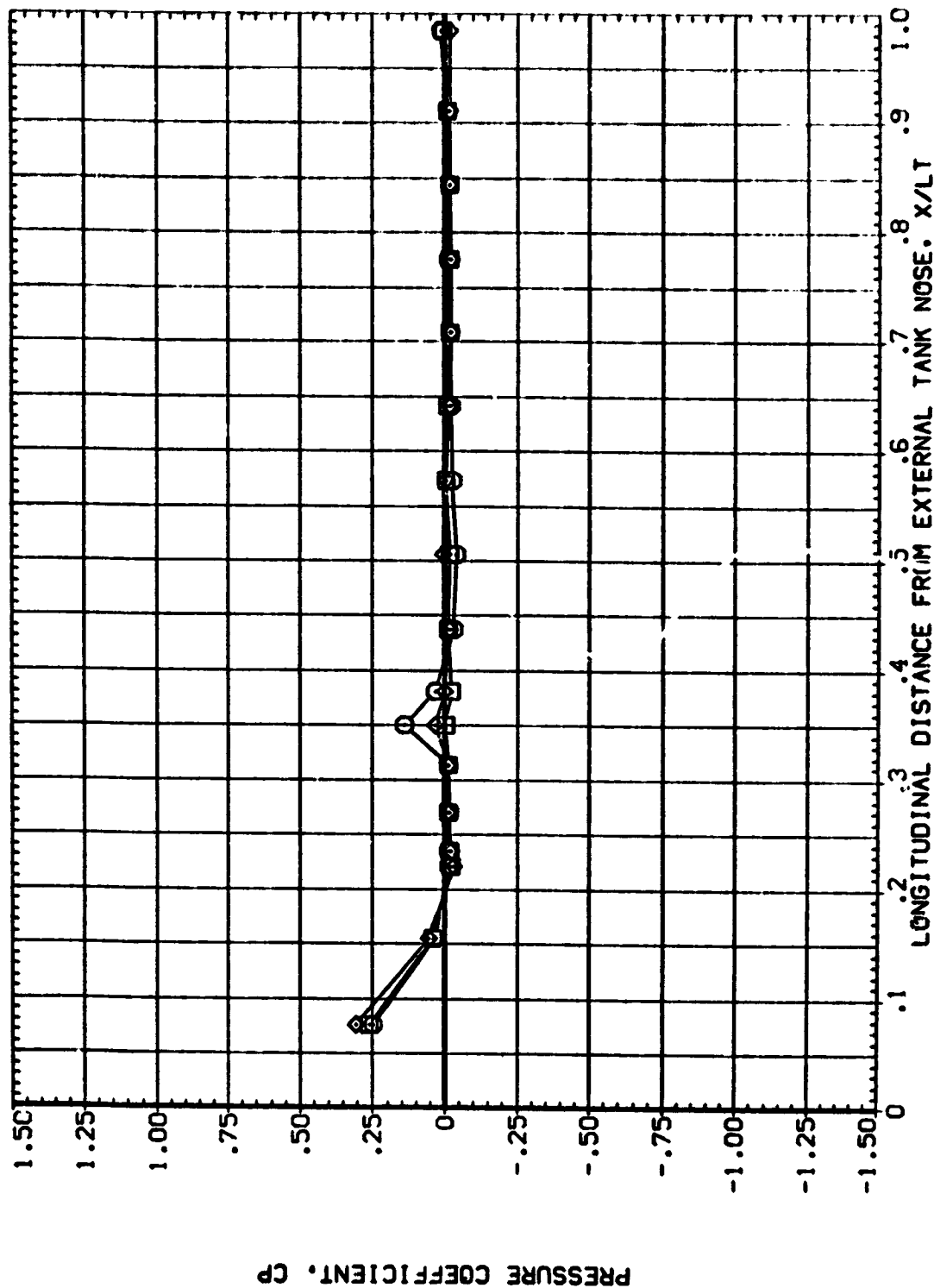
BETA MACH  
8.000 3.500

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

ALPHA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
.000 CONFIG  
.140 RUDDER  
.000 ORBITAL

90.000  
.000  
.500



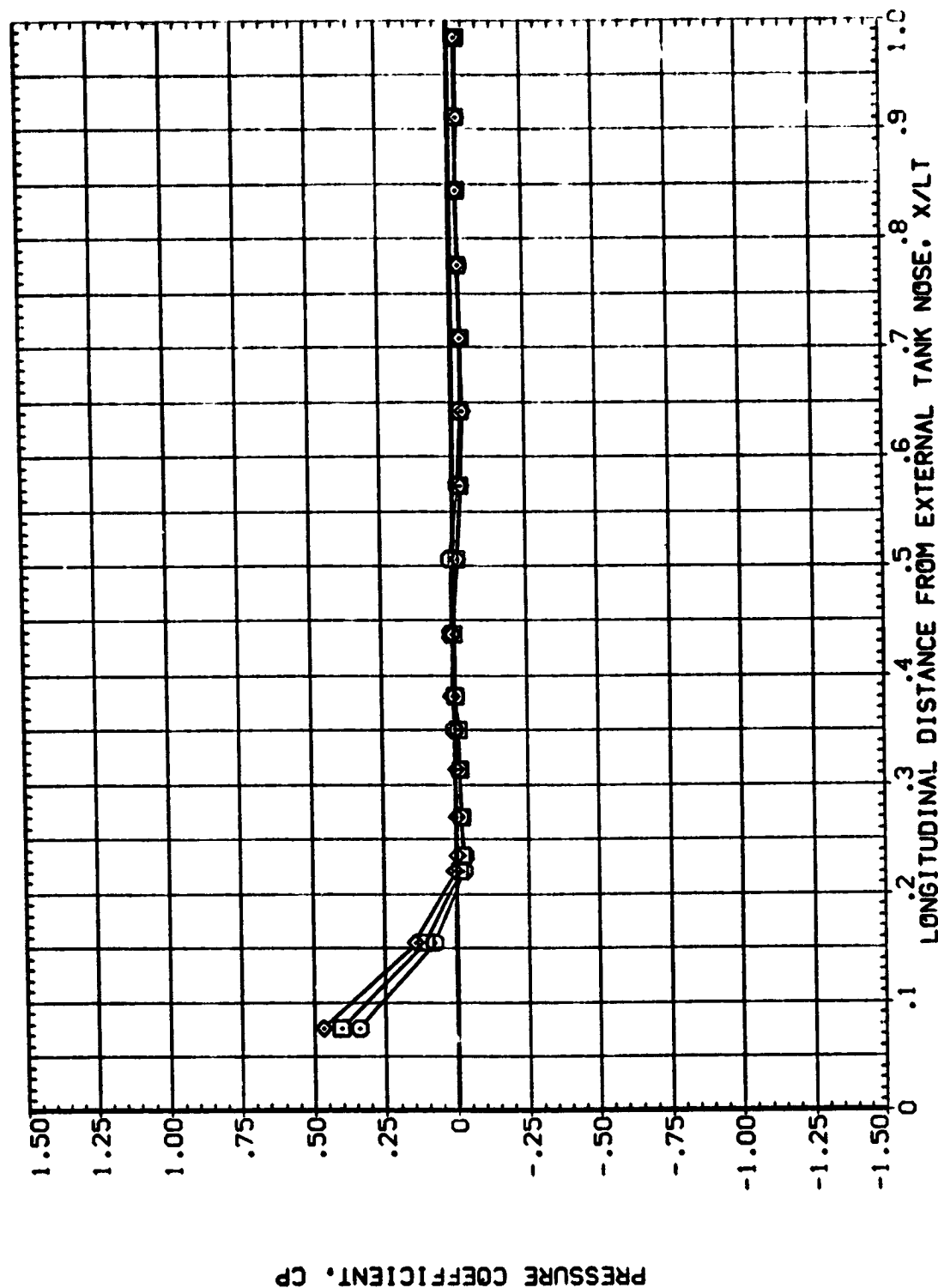
LONGITUDINAL DISTANCE FROM EXTERNAL TANK NOSE, X/LT

PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

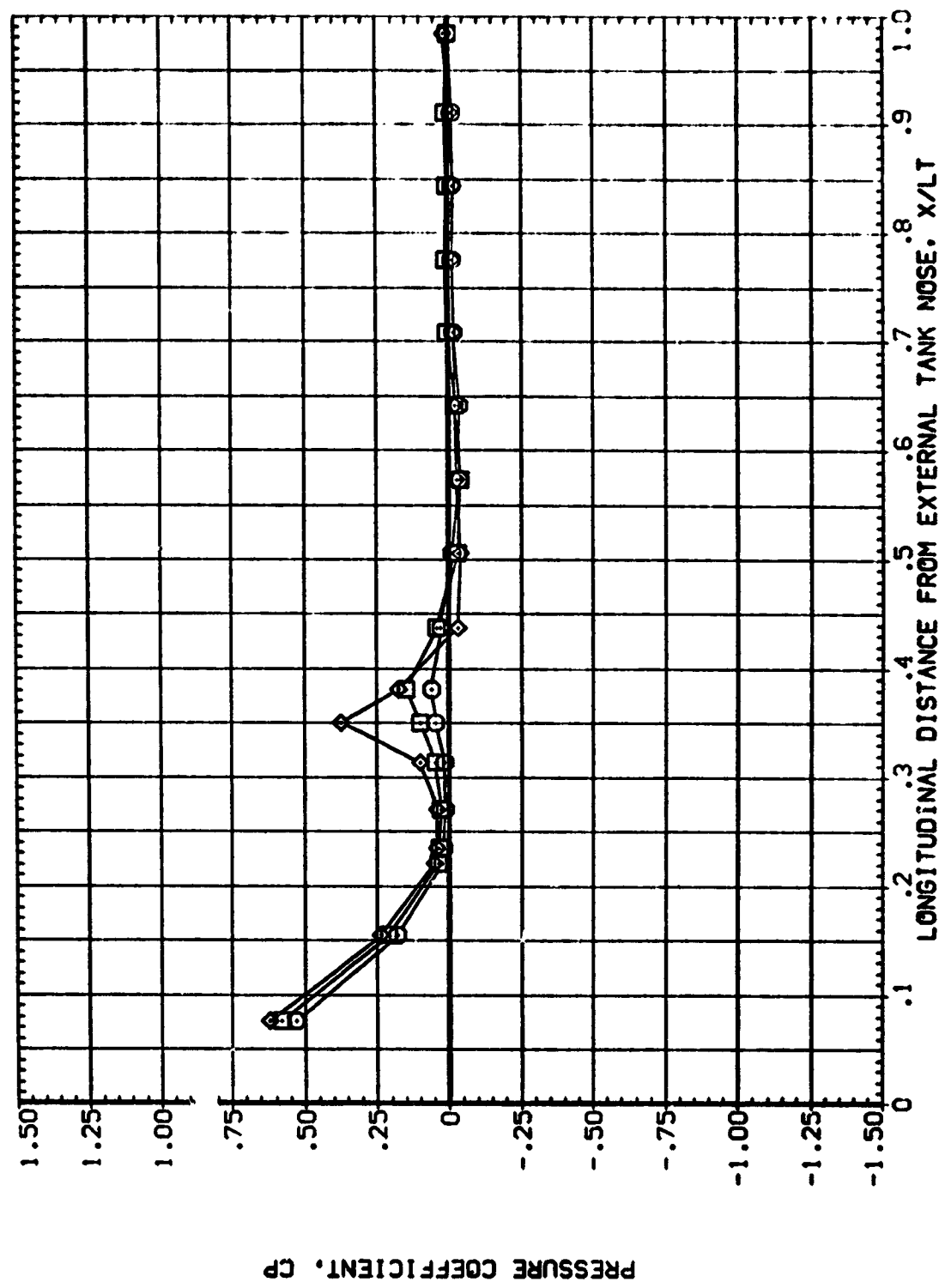
SYMBOL	PHI	BETA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	6.198	50. IN.	ALPHA	CONF IG	50.000
□	162.000	8.000	3.500	LREF	5.313	IN.	DELTA Z	RUDDER	.000
◇	180.000			BREF	5.313	IN.	X-SRB	ORBITAL	.500
◇	198.000			XPRP	2.549	IN.			
				YPRP	.000	IN.			
				ZPRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	50. IN.	ALPHA	CONF IG	90.000
□	216.000	8.000	3.500	5.313	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	252.000							IN.	X-SRB	.000	.500
								IN.			

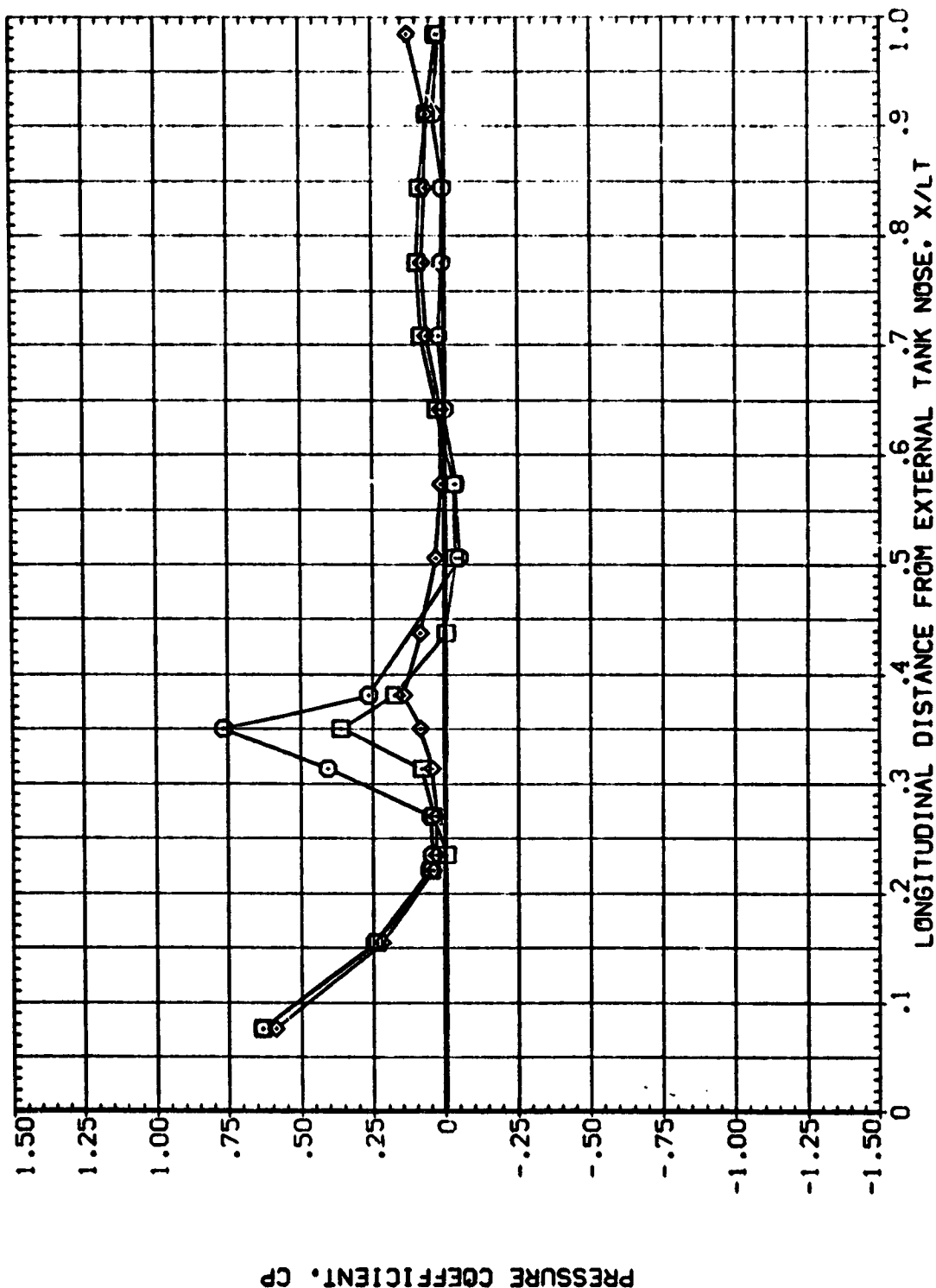


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	PMI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	UREF	BREF	X-SPB	CONF IG	CL	CD	CD
□	270.000	8.000	3.500	6.198	5.313	5.313	2.549	.000	.140	.000	.000
◇	306.000							.000	.000	.000	.000

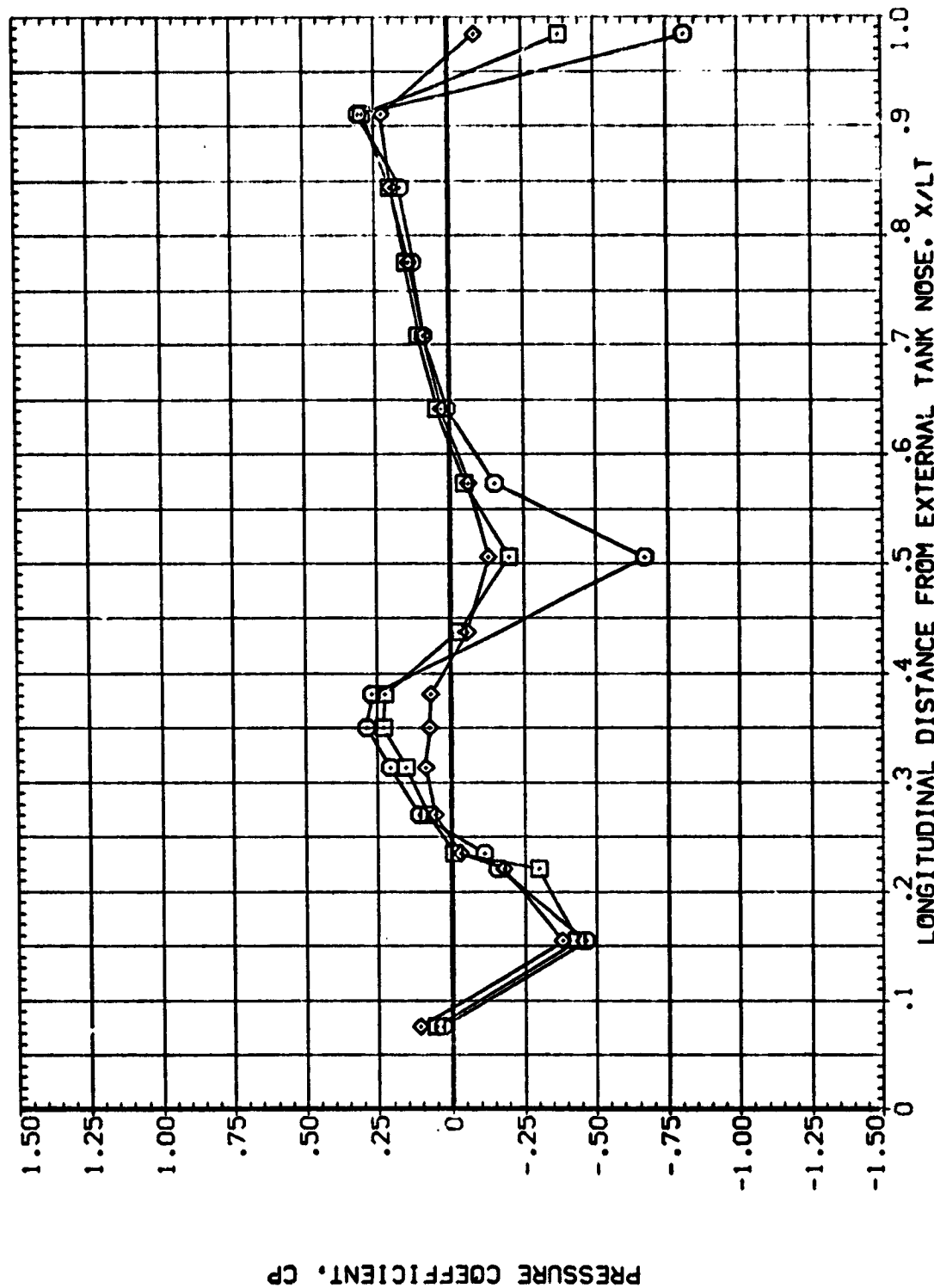


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

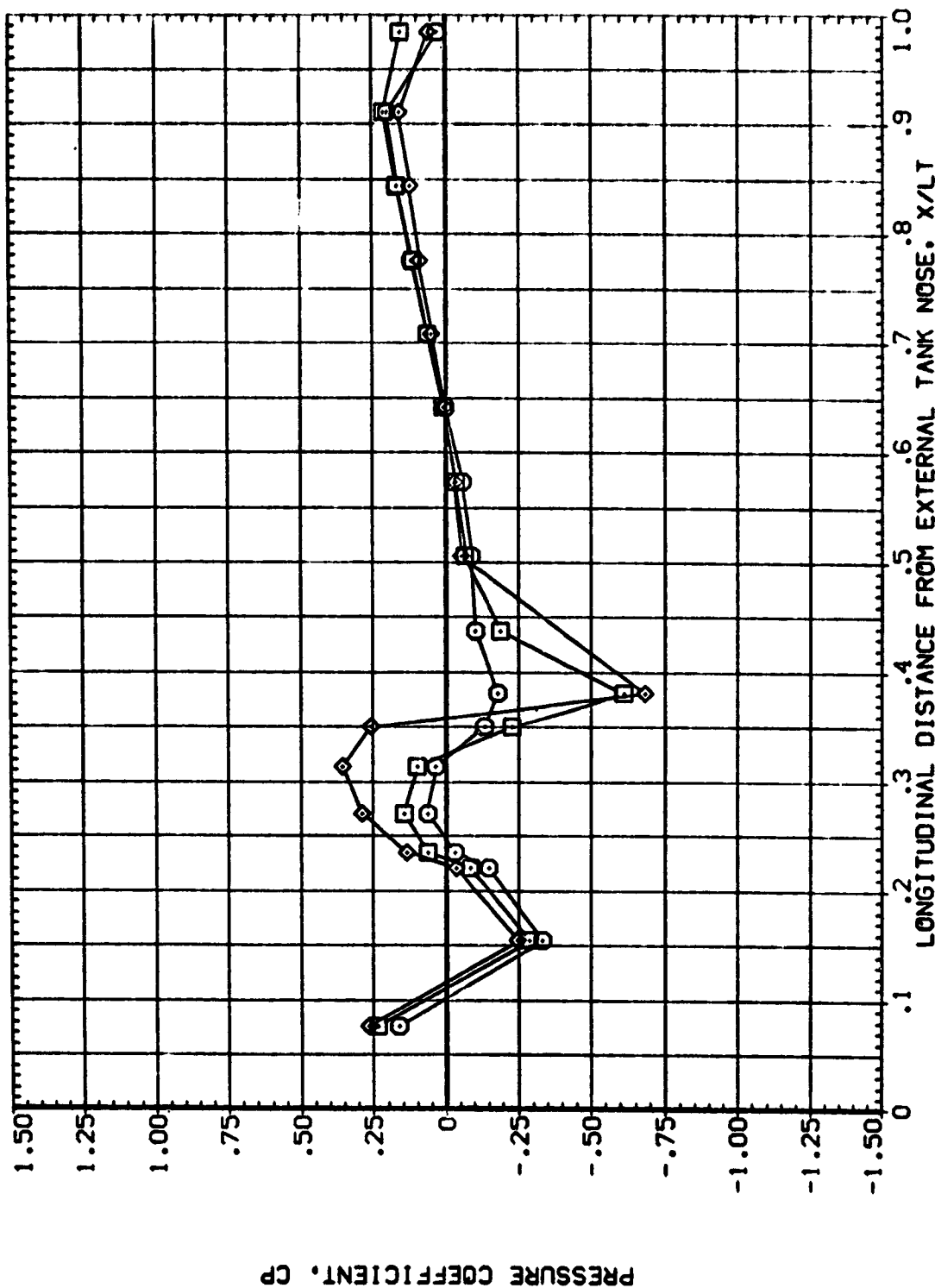
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IG	
○	.020	-4.000	.900	LREF	IN.	5.000	50.000
□	18.000			BREF	IN.	.140	.000
◇	36.000			XMRP	IN.	.000	.500
				YMRP	IN.		
				ZMRP	IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

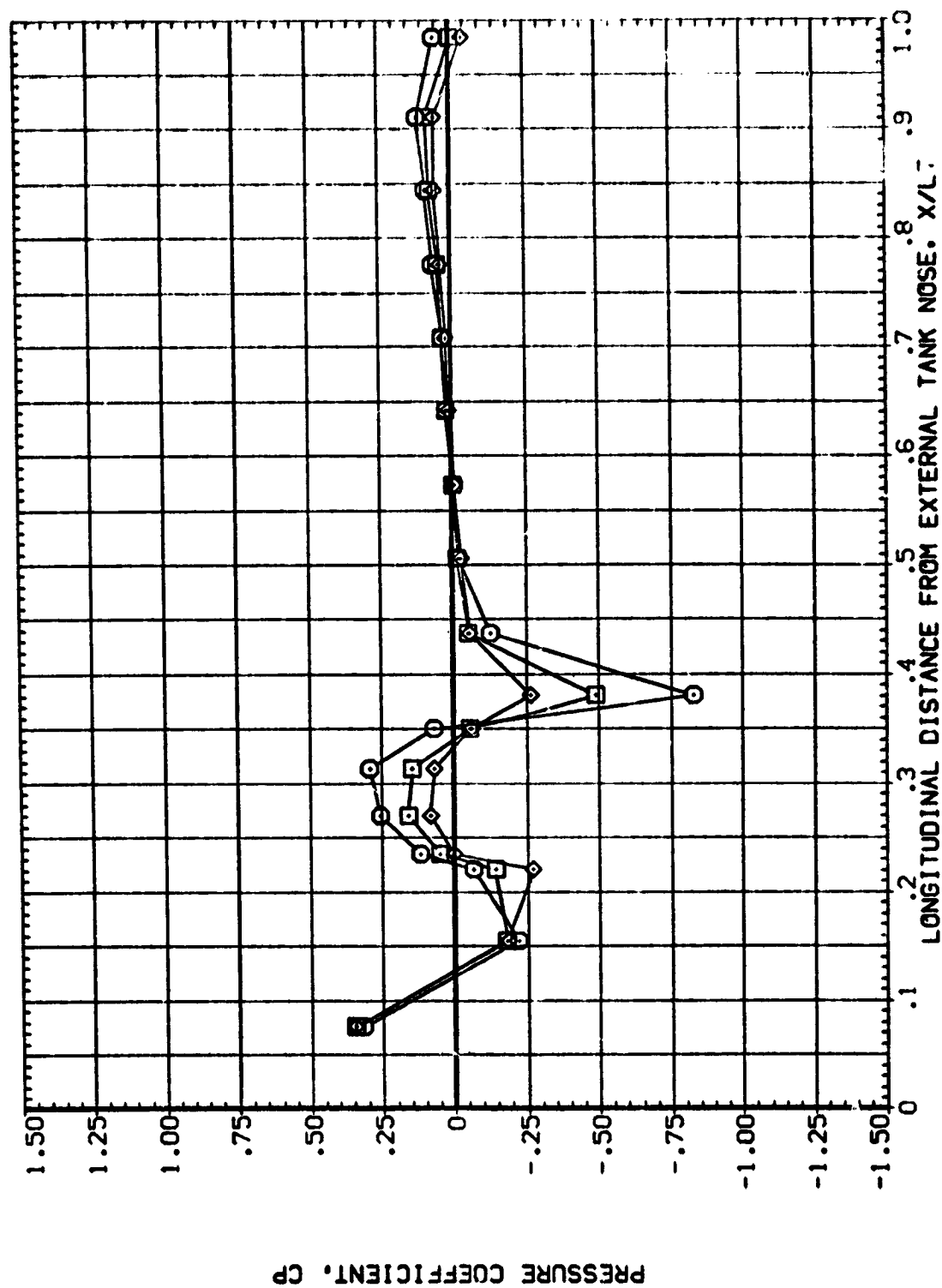
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SD, IN.	ALPHA	CONF IG	ORBIT INC
○	54.000	-4.000	.900	6.198	5.313	5.313	2.549	IN.	DEL TAZ	.000	.500
□	72.000							IN.	X-SF3	.000	
◇	90.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T03)

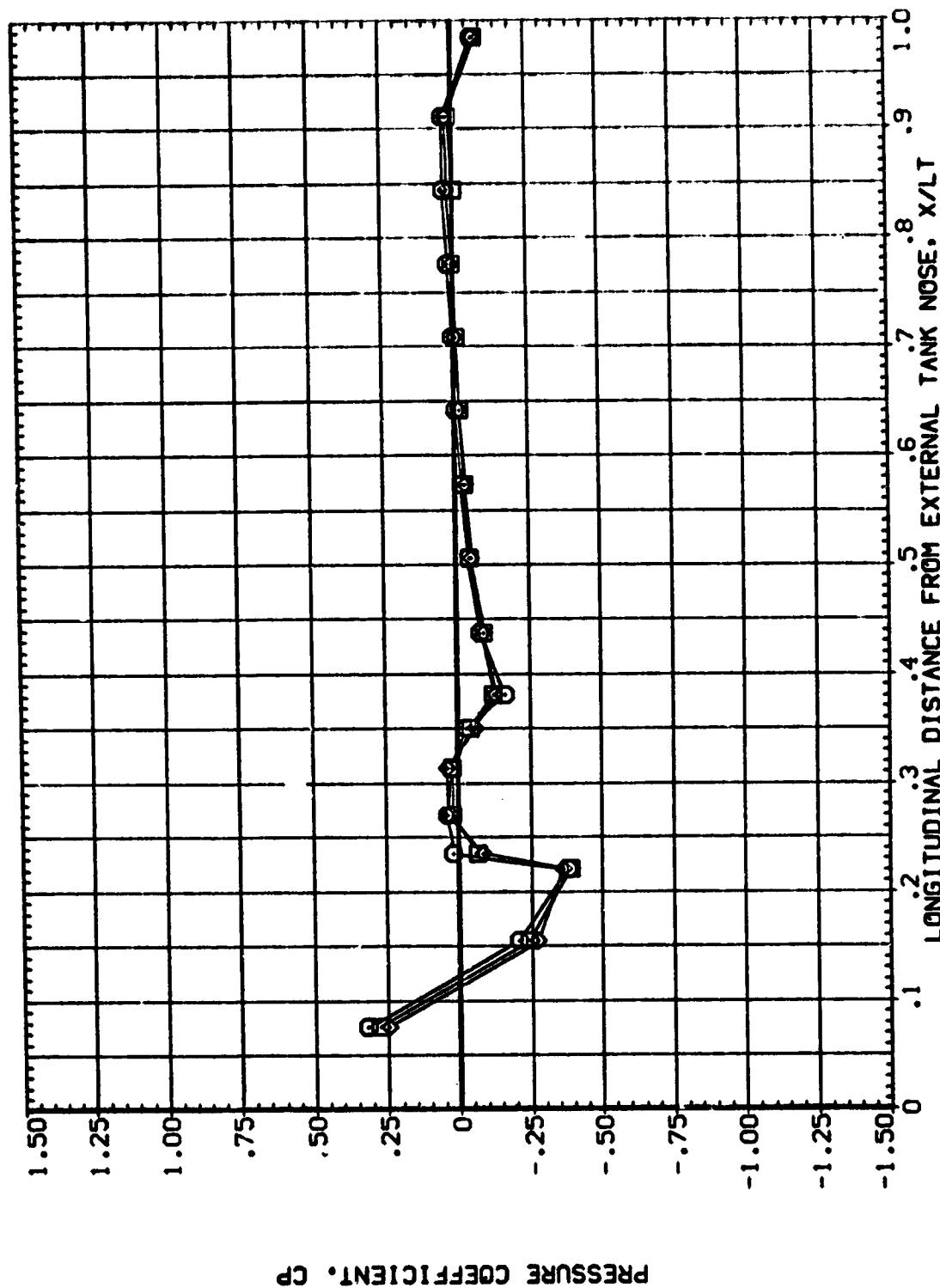
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIG	90.000
○	108.000	-4.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
□	126.000							IN.	X-SRB	.000	.500
◇	144.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

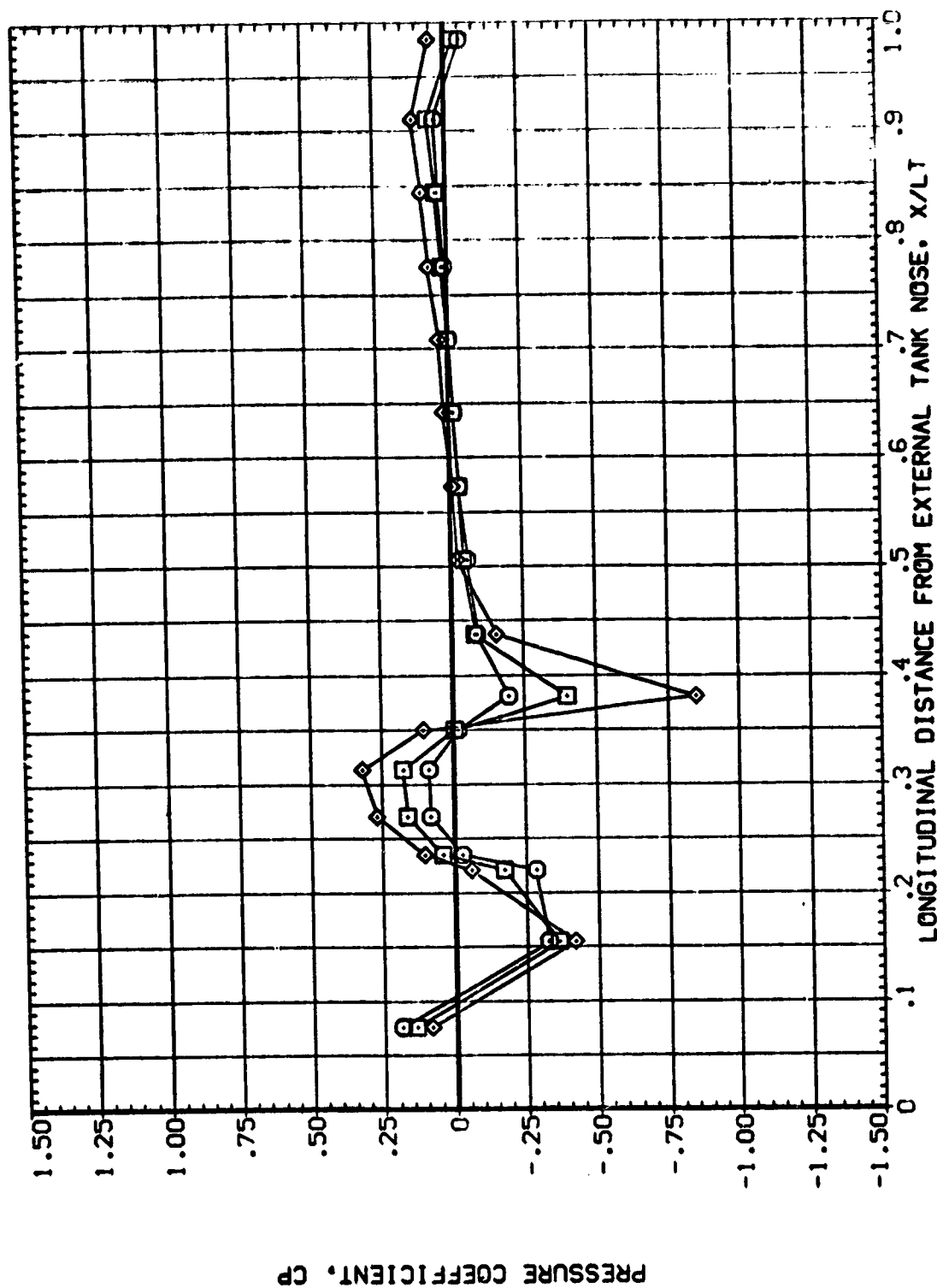
SYMBOL	PVI		BETA	MACH	REFERENCE DATA							PARAMETRIC VALUES													
	162.000	180.000	-4.000	.900	SREF	LREF	BREF	XMRP	YMRP	ZMRP	50. IN.	IN.	IN.	IN.	IN.	IN.	ALPHA	DELTA Z	X-SRB	5.000	.140	.000	90.000	.000	.500
○																									
□																									
◇																									



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

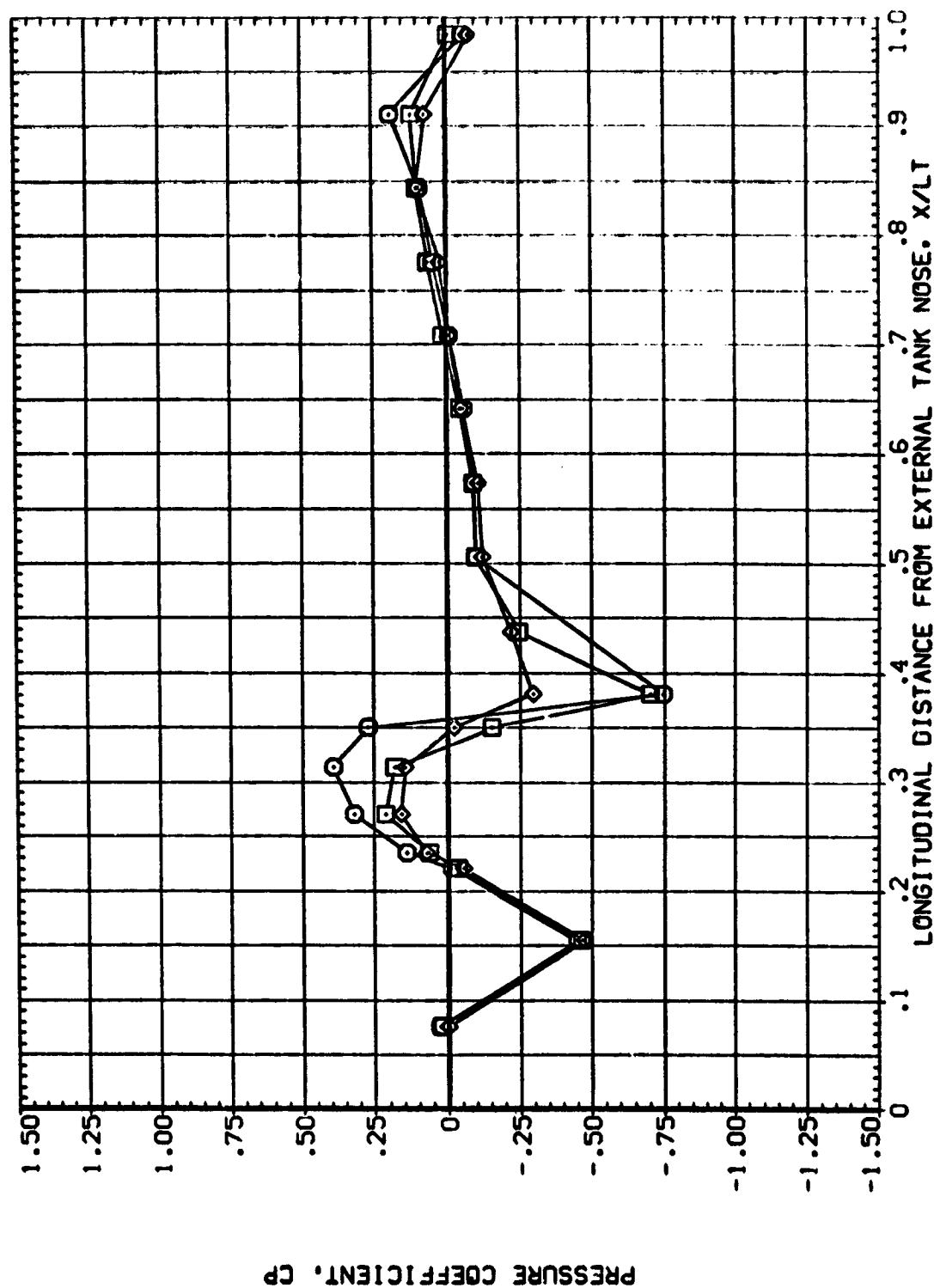
SYMBOL	REF		REFERENCE DATA		PARAMETRIC VALUES	
	PHI	BETA	MAC	INCH	CONF IG	ORIGIN
□	216.000	-4.000	.900	6.198	5.000	.000
◇	234.000			5.313	.140	.000
	252.000			2.549	.000	.500
				.000		
				.000		
				.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PAR. YTRIC VALUES			
				SREF	5.198	50. IN.	ALPHA	S 3	CONF IG	50.000	
○	270.000	-4.000	.900	LREF	5.313	IN.	DELTA Z		RUDER	.000	
□	288.000			BREF	5.313	IN.	X-SRB		ORBIT	.500	
◇	306.000			XPRP	2.549	IN.					
				YPRP	.000	IN.					
				ZPRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 324.000  
 342.000  
 360.000

BETA  
 -4.000

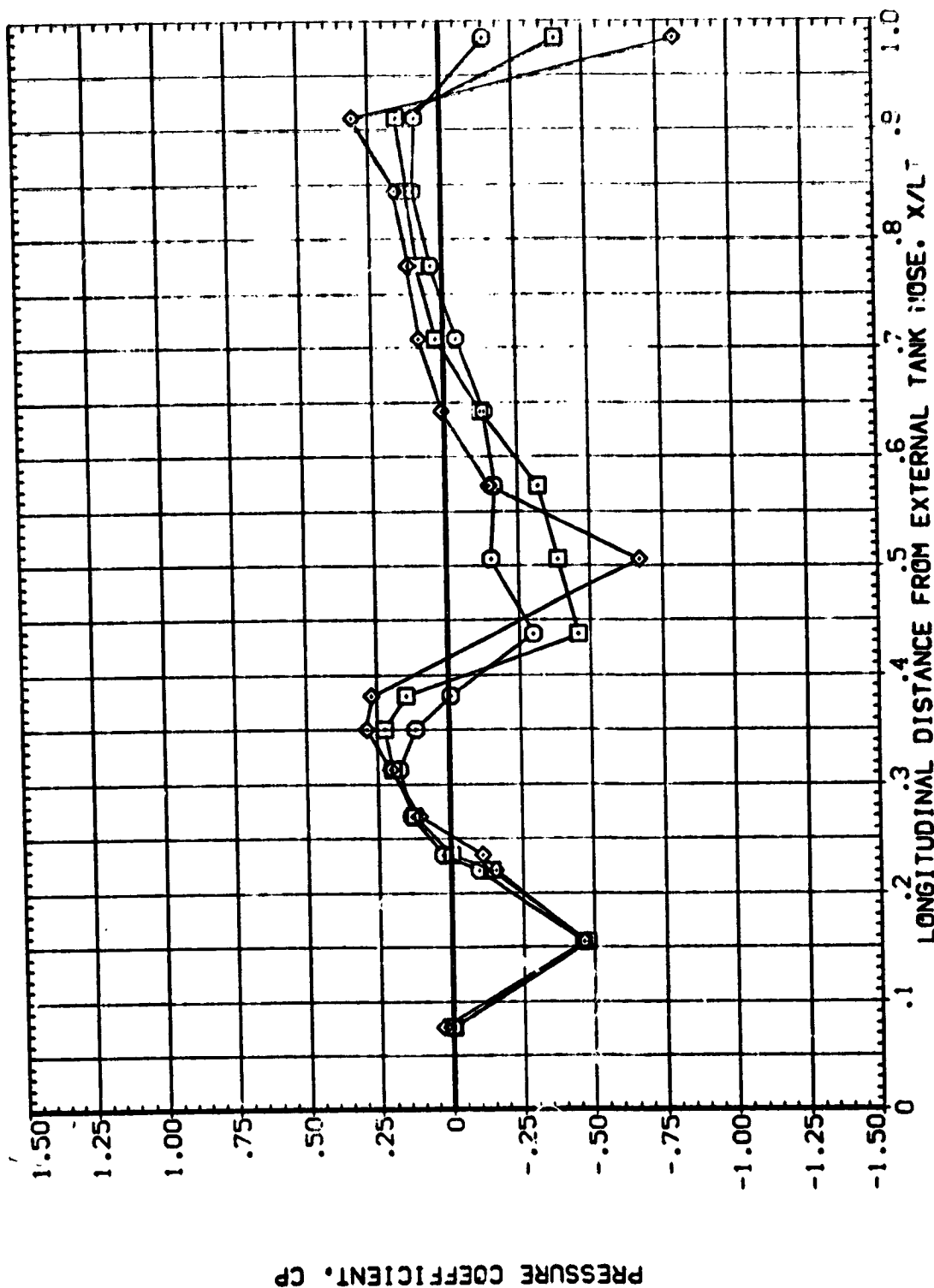
MACH  
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 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ◇  
 □  
 ○

PMI  
 .000  
 18.000  
 36.000

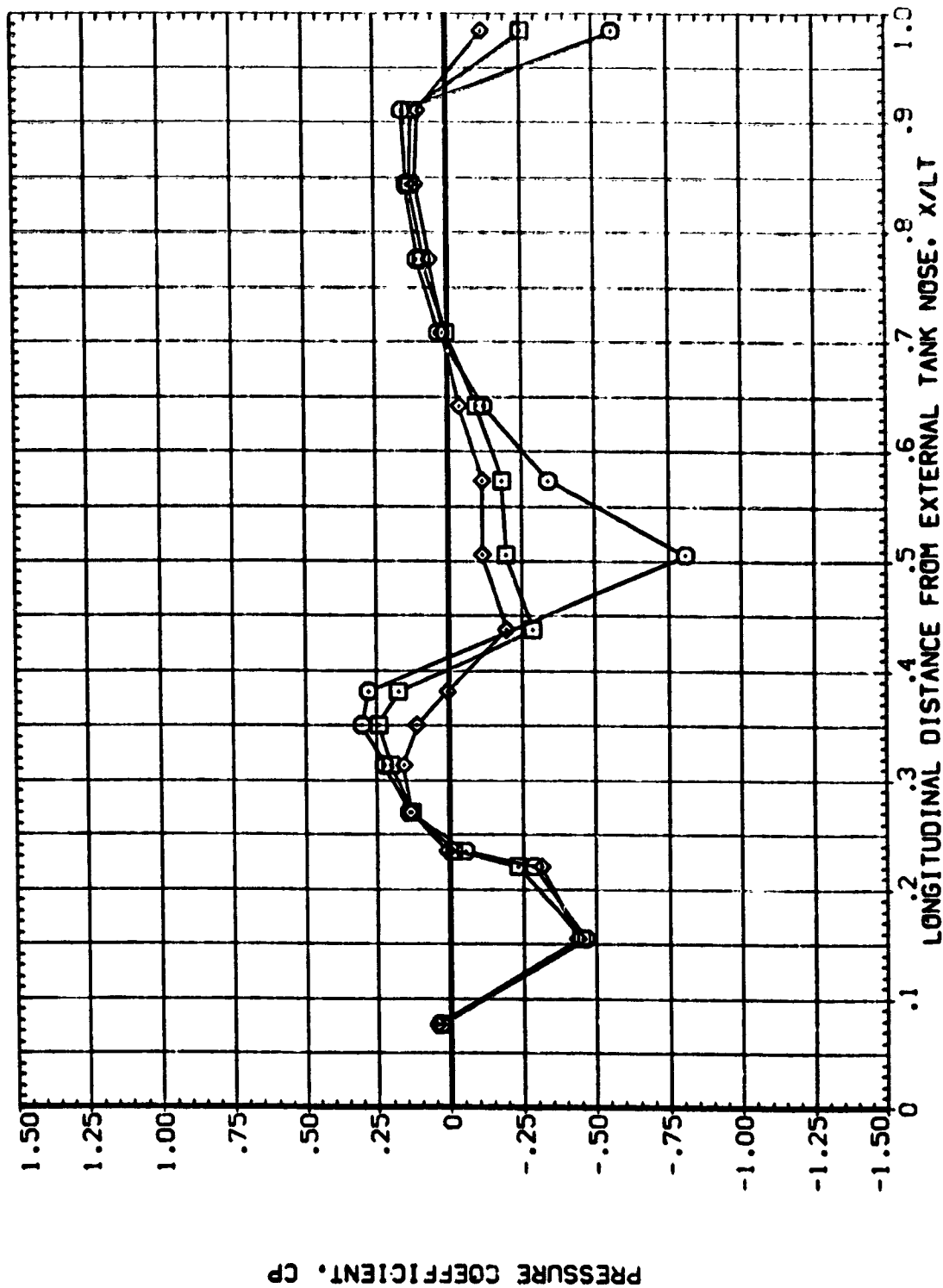
BETA  
 .000  
 .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 SREF 5.313  
 XPRP 2.548  
 ZPRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 5.000 CONF 15  
 .140 RUDDER  
 .000 DRB INC  
 90.000

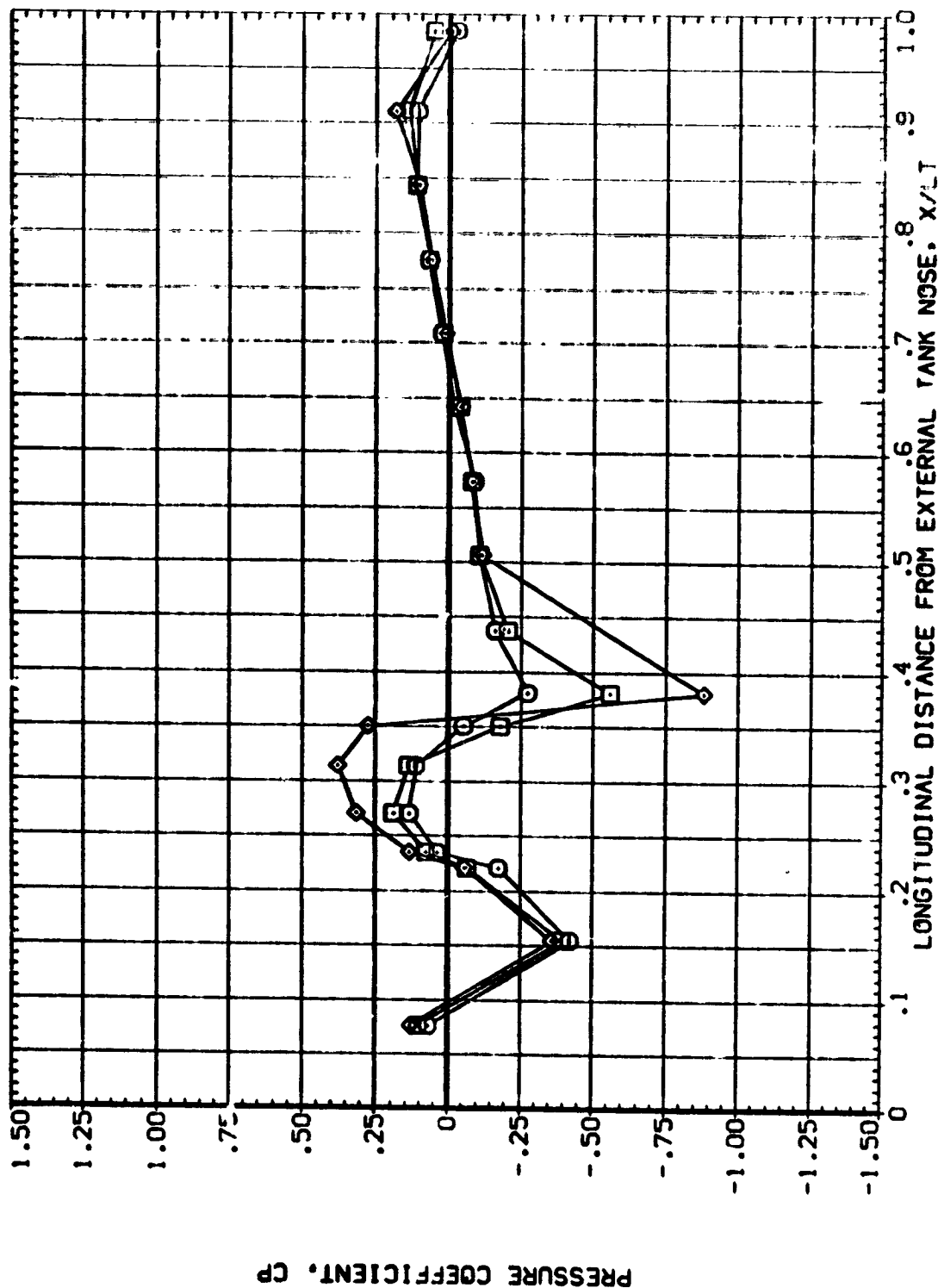


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T03)

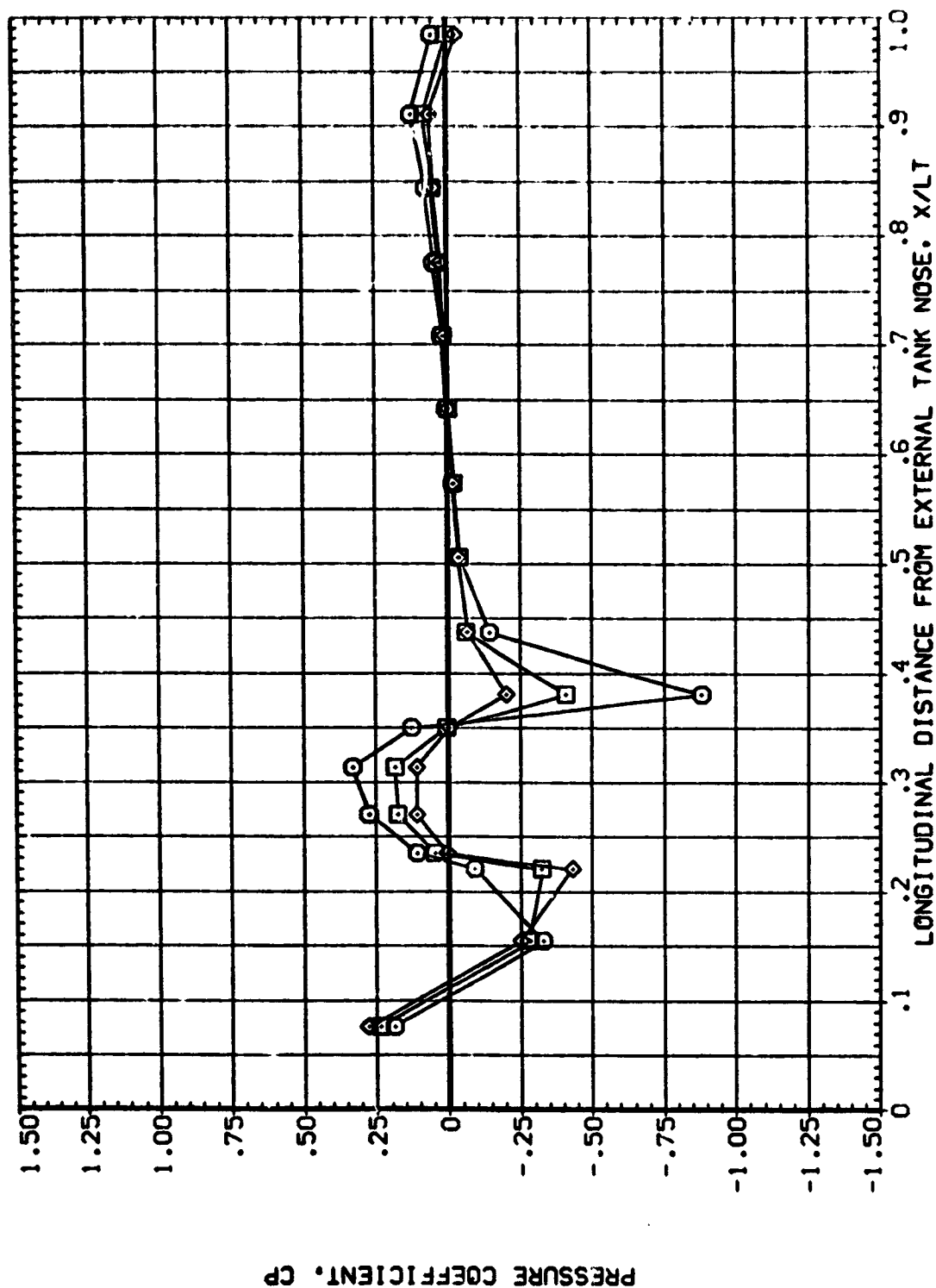
SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	54.000	72.000			SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTAZ
○	54.000	72.000	.000	.500	6.198	5.313	5.313	2.549	.000	.000	5.000	.140
□	72.000	90.000	.000	.500	5.313	5.313	5.313	2.549	.000	.000	.000	.000
◇	90.000		.000	.500	5.313	5.313	5.313	2.549	.000	.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

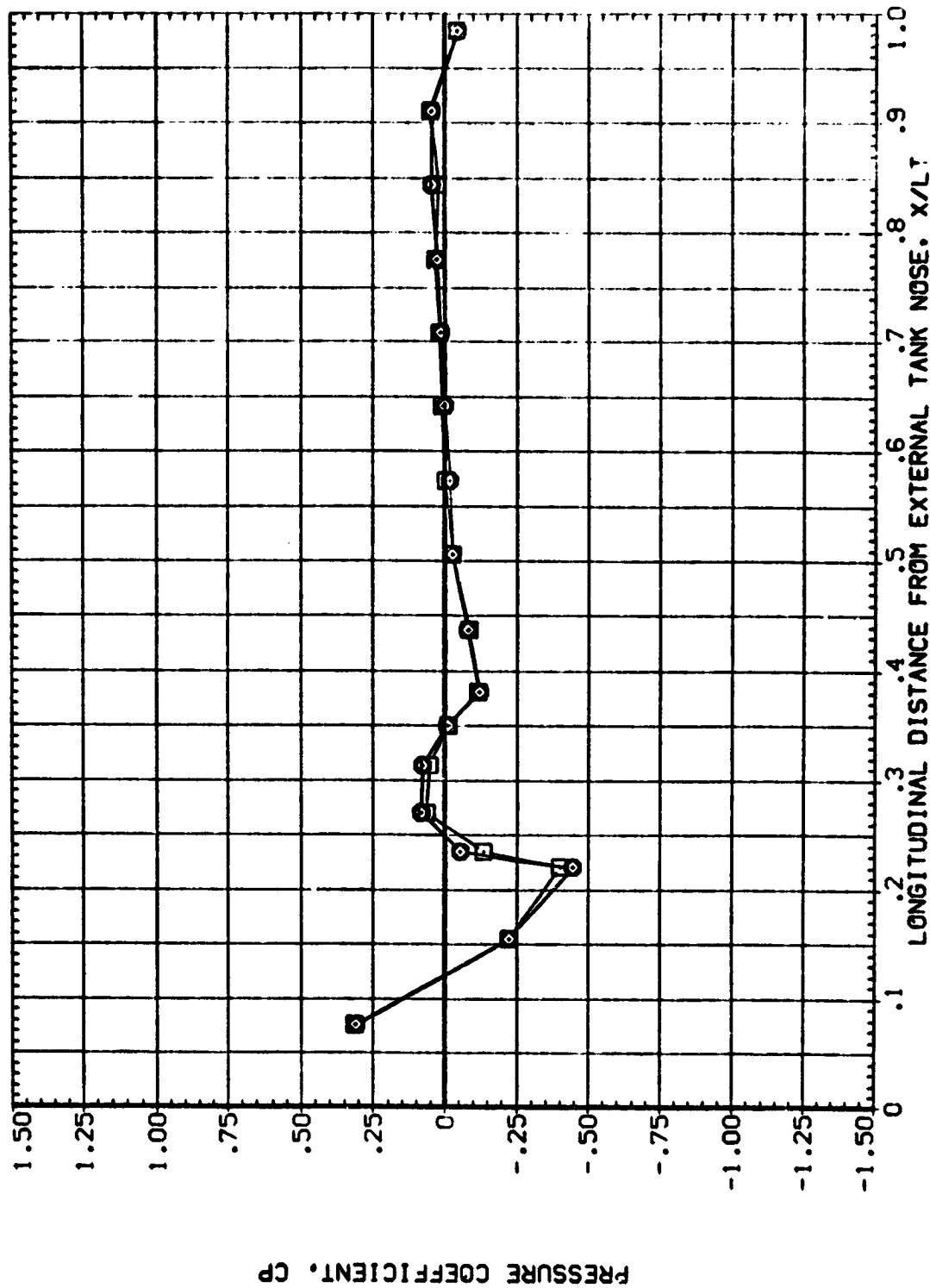
SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
◇	108.000	.000	.500	SREF 6.198	5.000 CONF IG
□	126.000			LREF 5.313	.140 RUDDER
◇	144.000			BREF 5.313	.000 ORB INC
				XREF 2.549	
				YREF .000	
				ZREF .000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
□	162.000	.000	.900	SREF 5.198	5.000 CONFIG 90.000
◇	180.000			LREF 5.313	.140 RUDDER .000
	196.000			BREF 5.313	.000 098INC .500
				XMRP 2.549	
				YMRP .000	
				ZMRP .000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MCFC 567 (1A32F) T9 S3/2 S3/2 03

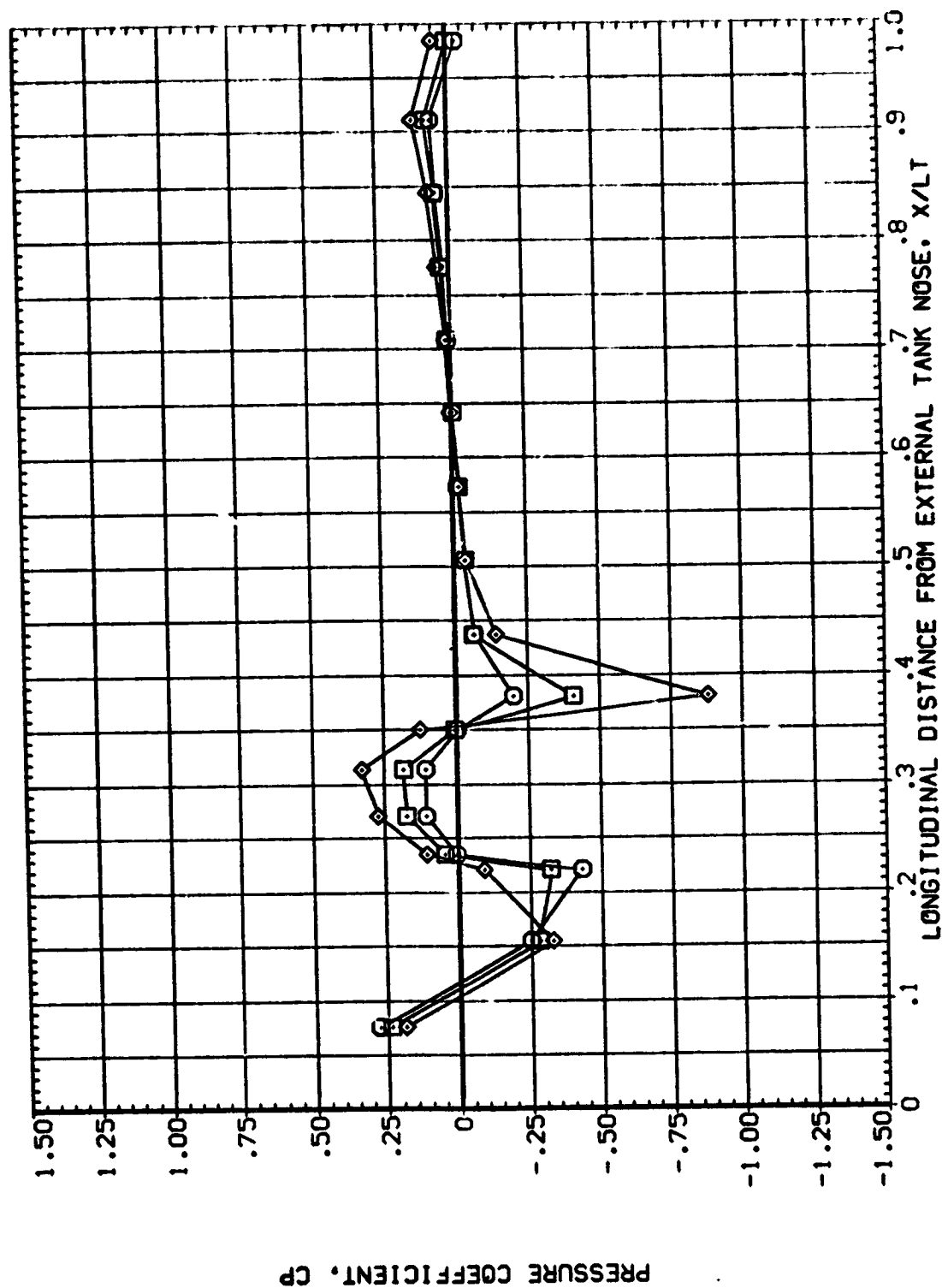
SYMBOL	PHI
○	216.000
□	234.000
◇	252.000

BETA MACH 006.900

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

	PARAMETRIC VALUES
ALPHA	5.000
DELTA Z	.140
X-SRB	.000
	CONFID
	R-ORDER
	ORBNIC

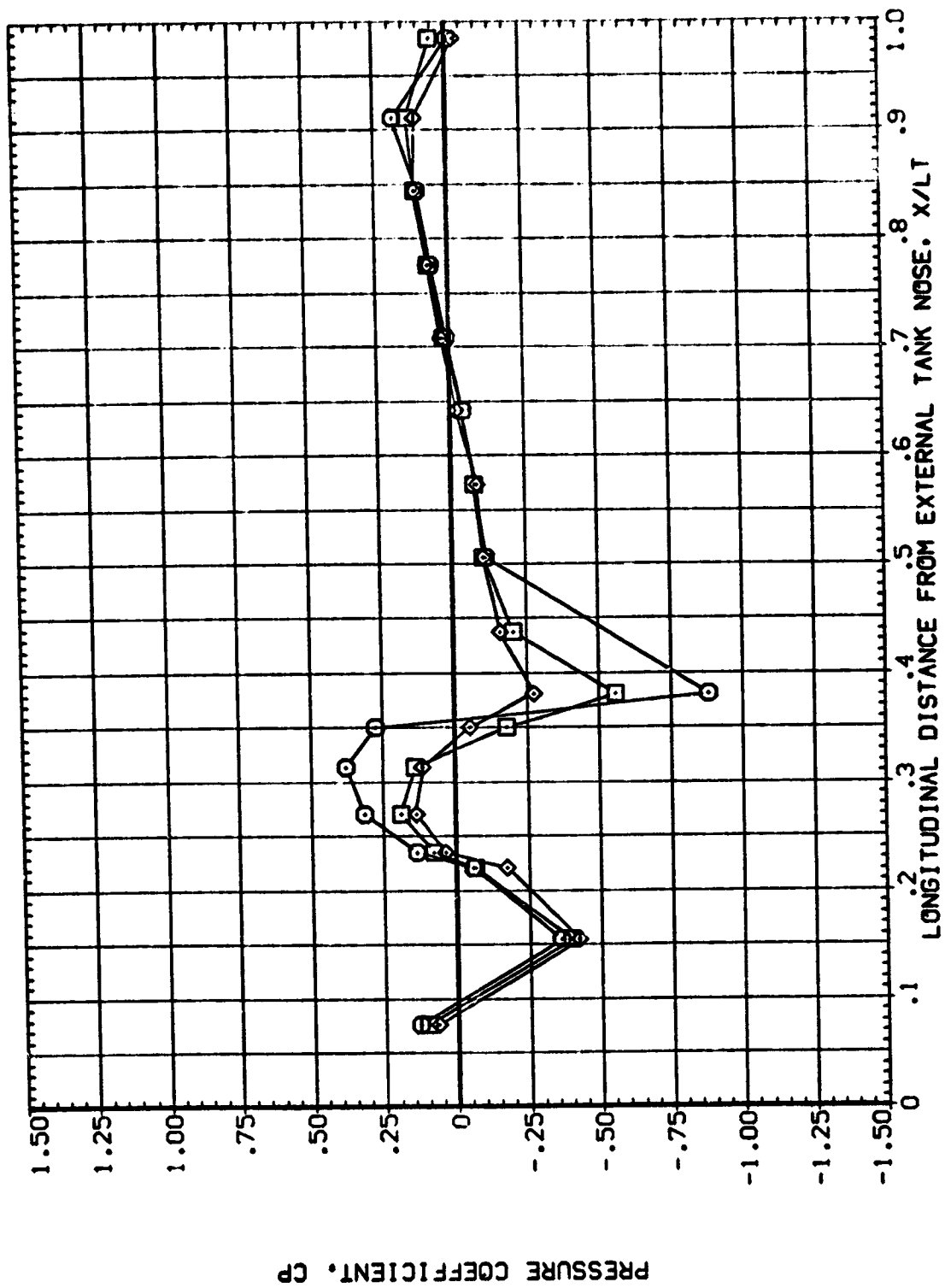
PARAMETRIC VALUES	
5.000	CONFIG
.140	R. COEF
.000	ORIGIN
90.000	
.000	
.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

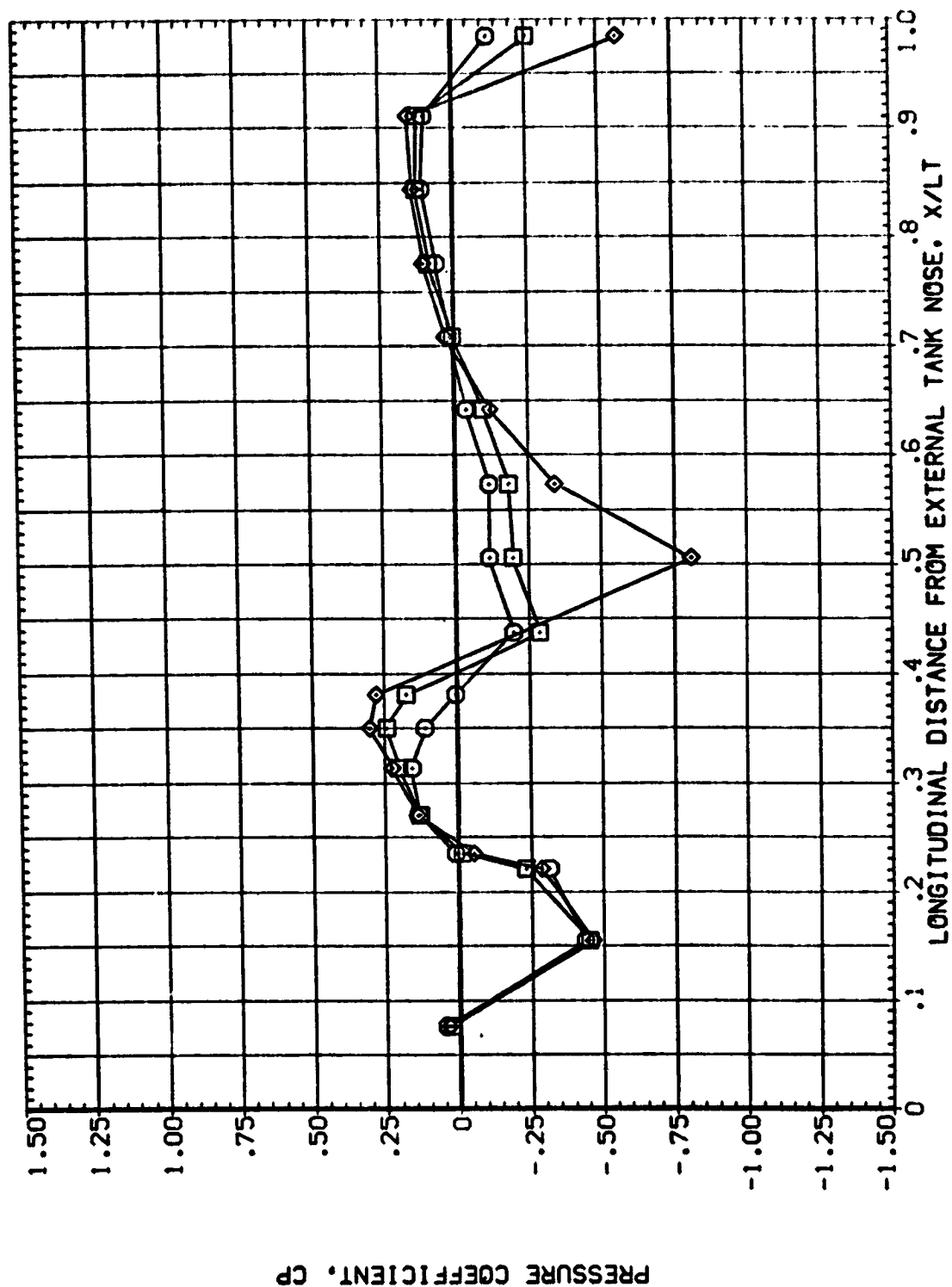
SYMBOL	PHI	BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES			
				SREF	LIREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTAZ	RUDDER	ORBIT
○	270.000	.000	.900	6.198	5.313	5.313	2.549	.000	.000	5.000	.140	RUDER	.000
□	288.000										.000	ORBIT	.500
◇	306.000												



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA		SQ. IN.		PARAMETRIC VALUES	
	324.000	342.000	.000	.000	.900		SREF	5.198	IN.		5.000	CONF IG
□							LREF	5.313	IN.		.140	RUDDER
◇							BREF	5.313	IN.		.000	ORBINC
◇							XMRP	2.549	IN.			
							YMRP	.000	IN.			
							ZMRP	.000	IN.			

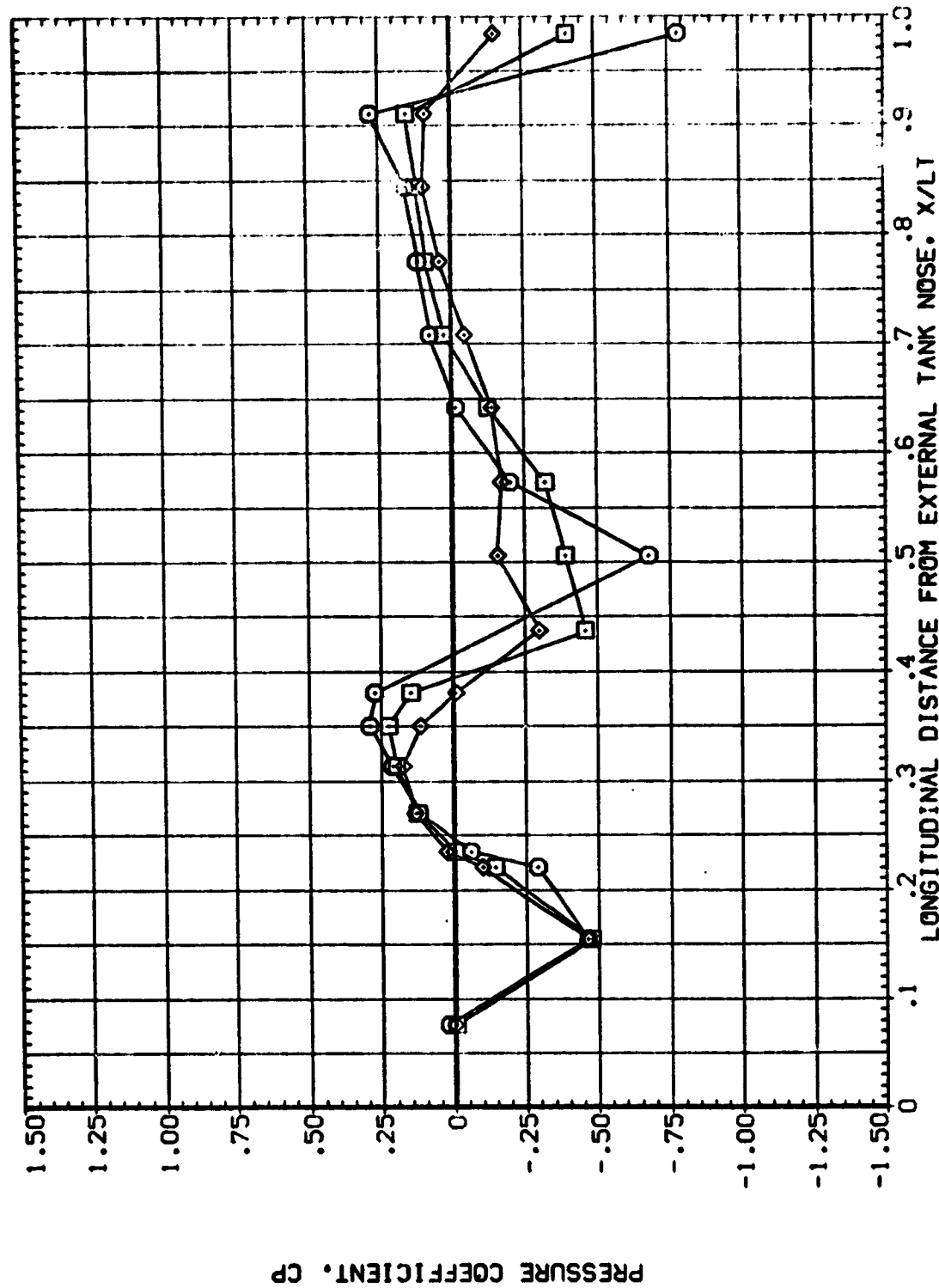


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTAZ	X-SRB	CONF IG
○	.000	4.000	.900	6.198	5.313	5.313	2.549	.000	.000	5.000	.140	.000	.000
□	18.000												.500
◇	36.000												



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ◇  
 □  
 ◇

PHI  
 54.000  
 72.000  
 90.000

BETA  
 4.000

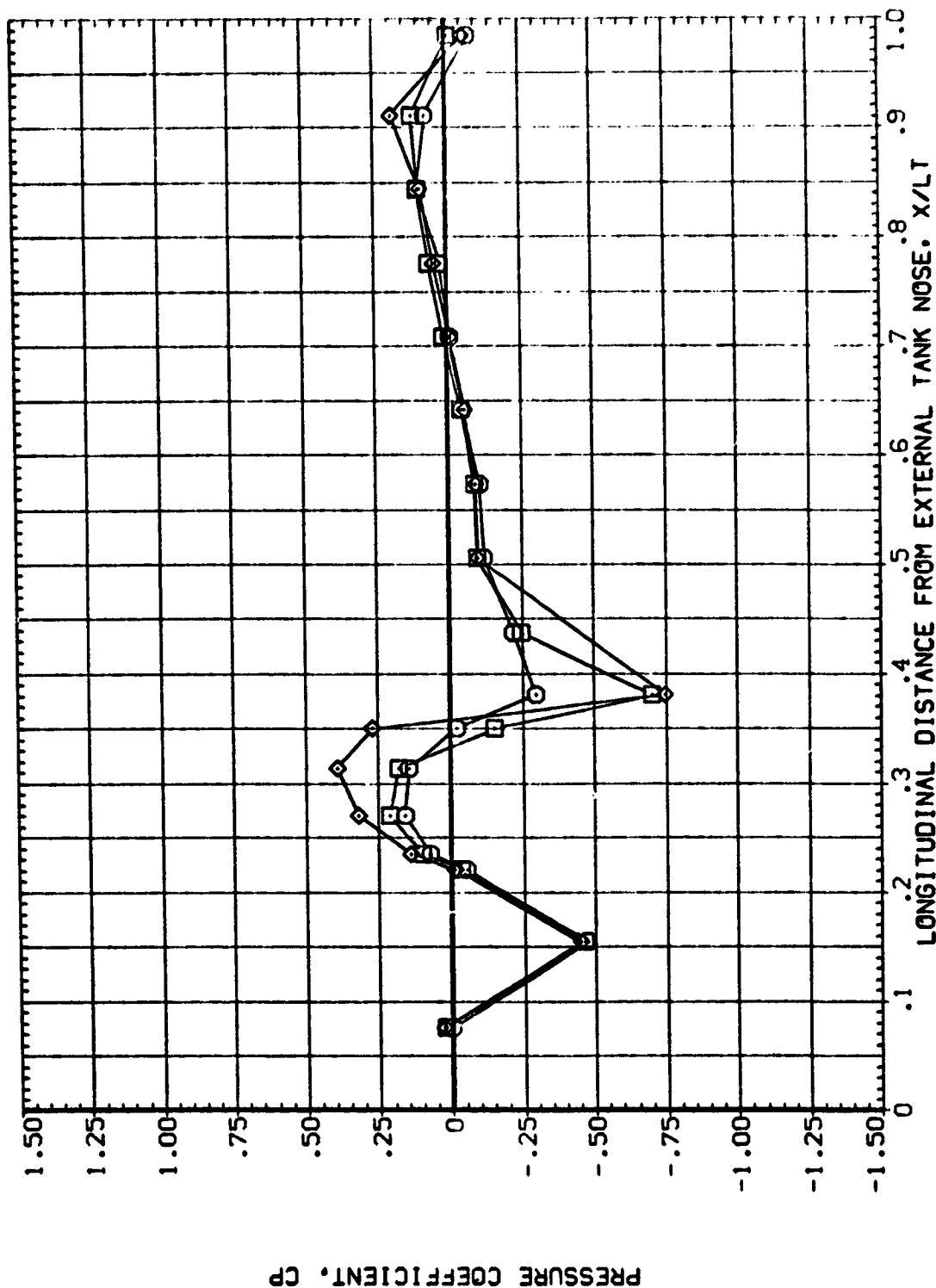
MACH  
 .900

REFERENCE DATA  
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 LREF 5.313  
 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

SO. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

**SYMBOL**      

PMI	BETA	MACH
108.000	4.000	.900
126.000		
144.000		

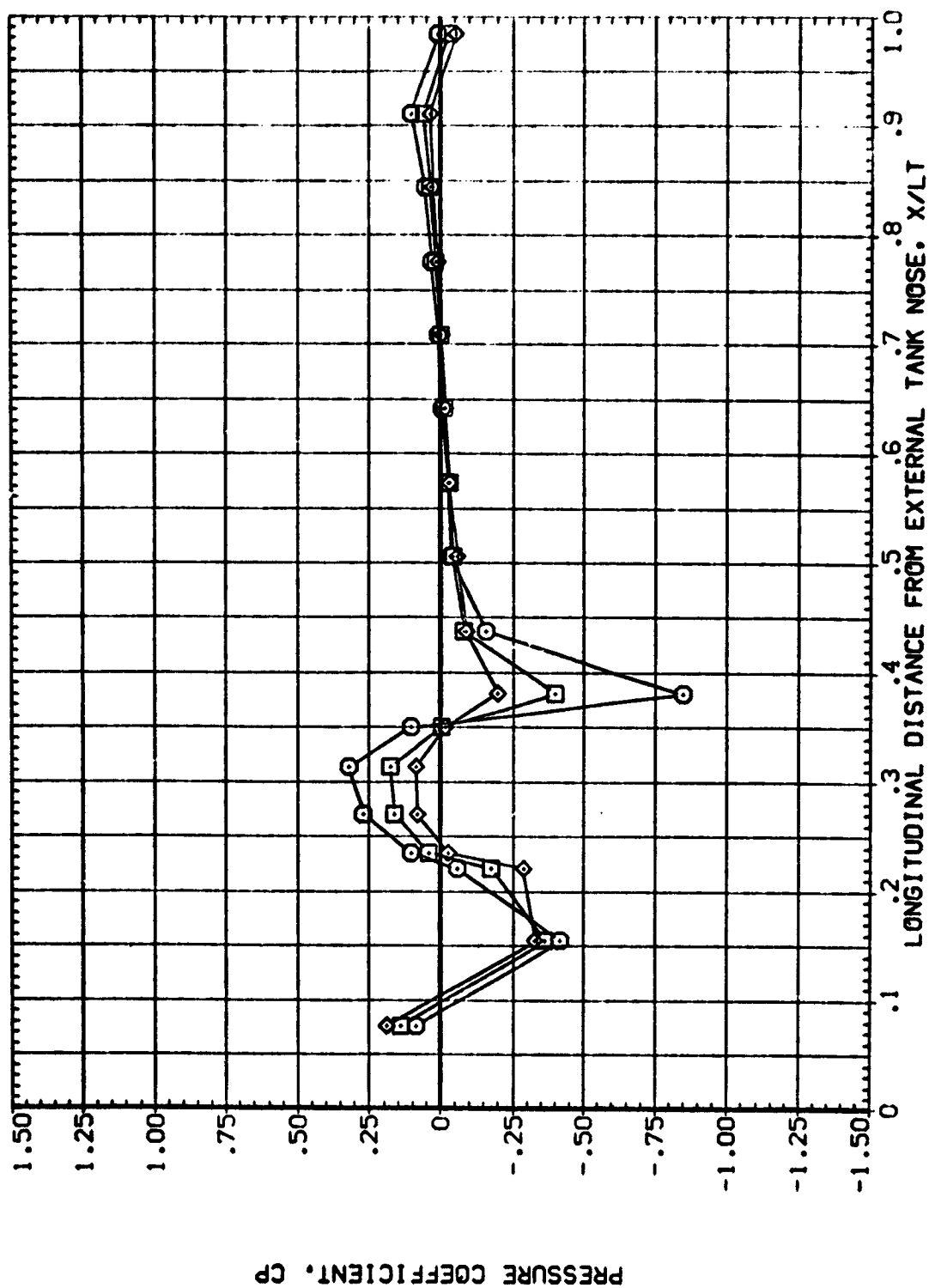
REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
OMRP	2.549
YMRP	.000
ZMRP	.000

922222

ALPHA  
DELTA Z  
X-SAB

PARAMETRIC VALUES

005.  
000.  
90.005



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○  
 □  
 ◇

PMI  
 162,000  
 180,000  
 198,000

BETA  
 4.000

MACH  
 .900

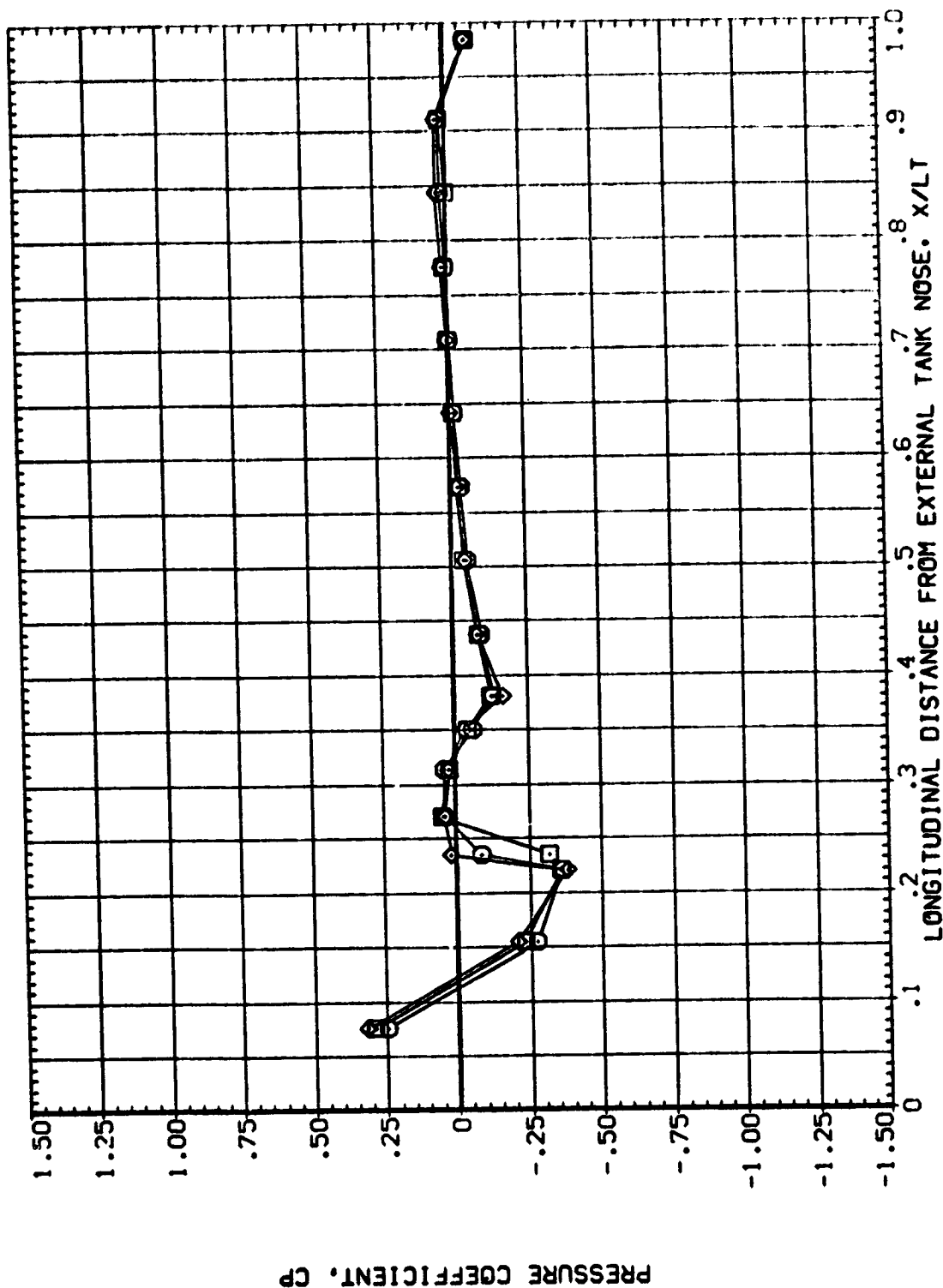
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YPRP 2.549  
 ZPRP .000

SD, IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 5.000 CONFIG  
 .140 RUDDER  
 .000 DRBINC

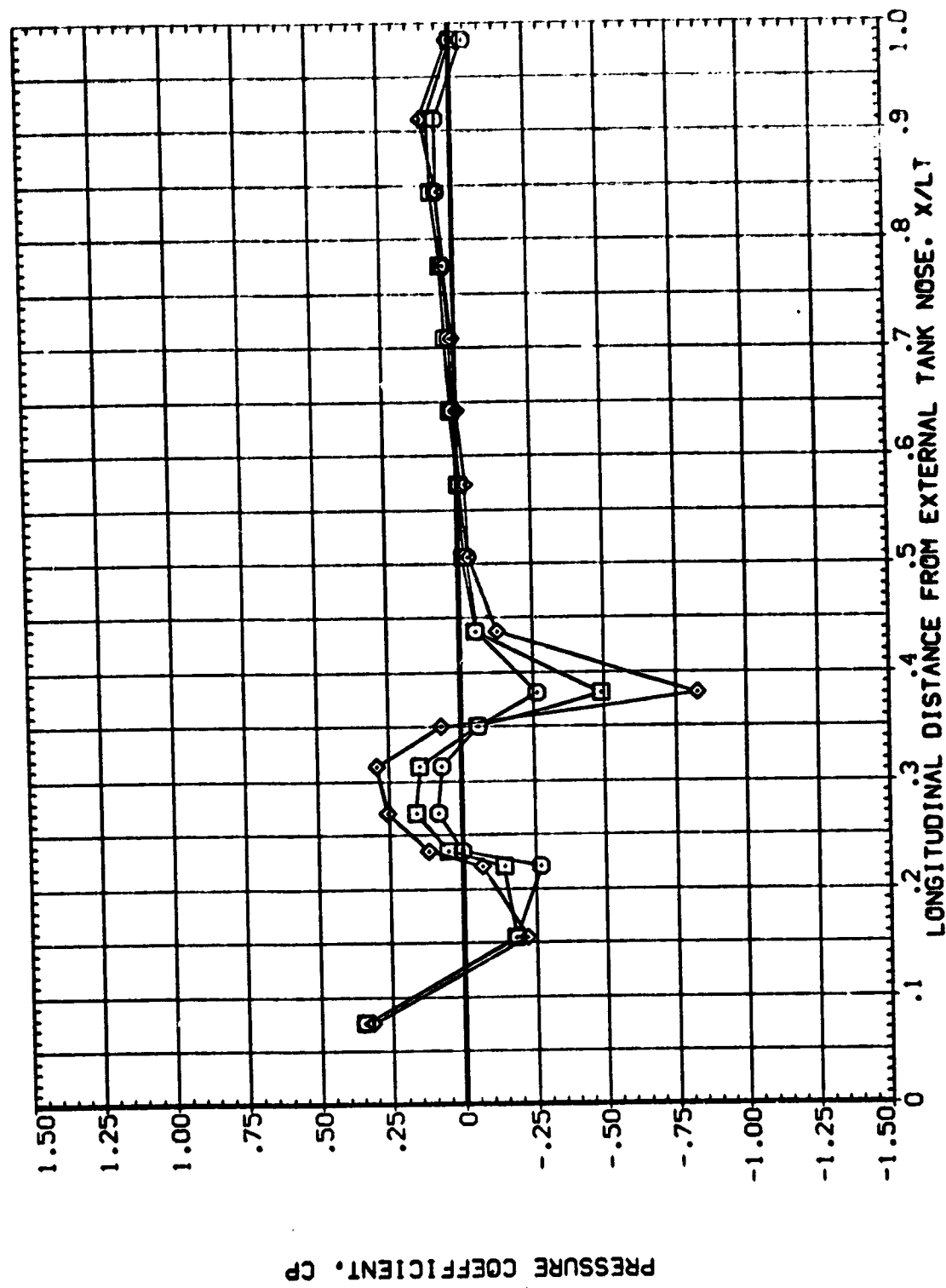
50.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

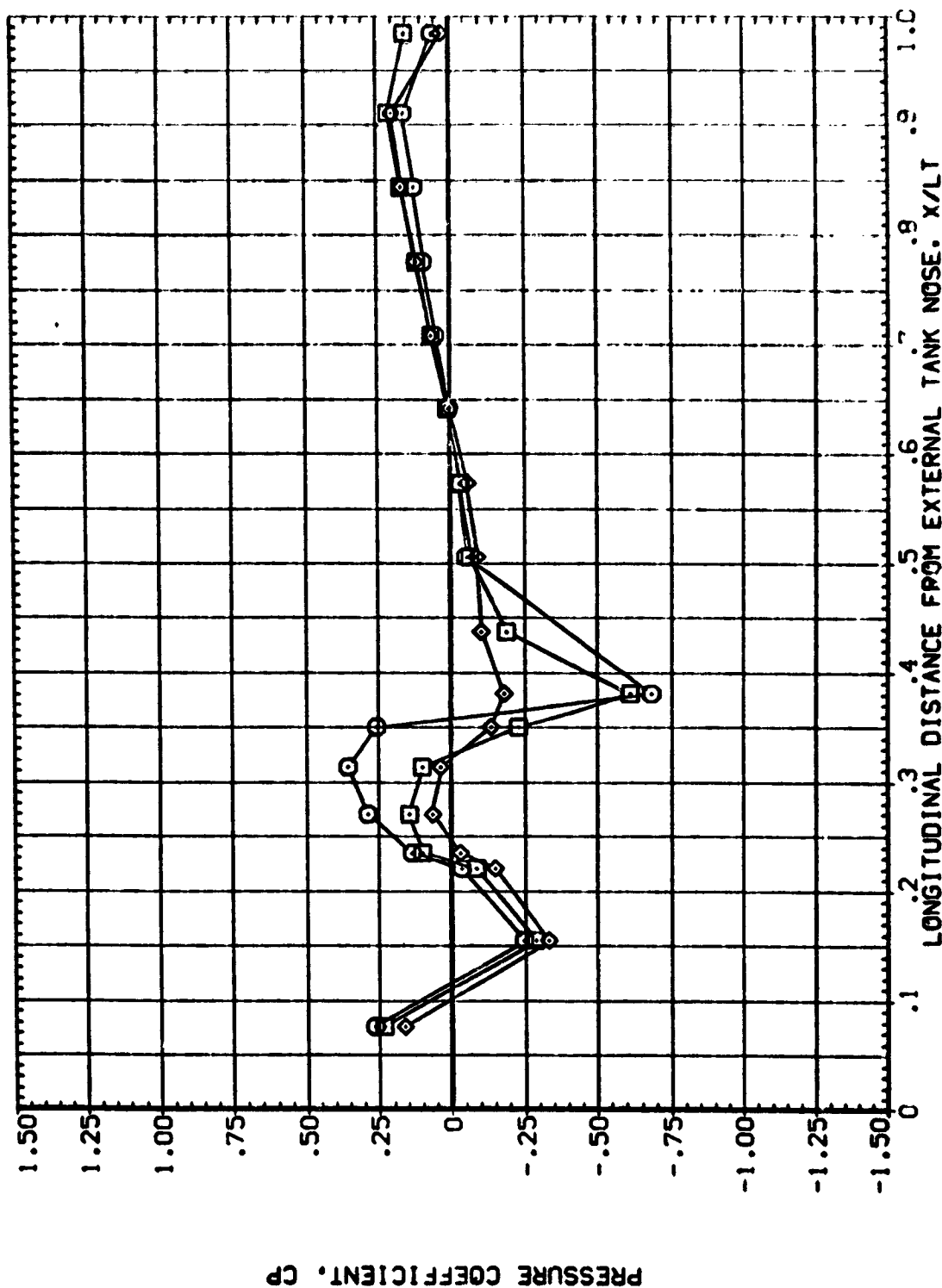
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	SREF	XREF	50. IN.	ALPHA	5.000	CONF IG
○	216.000	4.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	RUDER
□	234.000							IN.	X-SRB	.000	ORB INC
◇	252.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

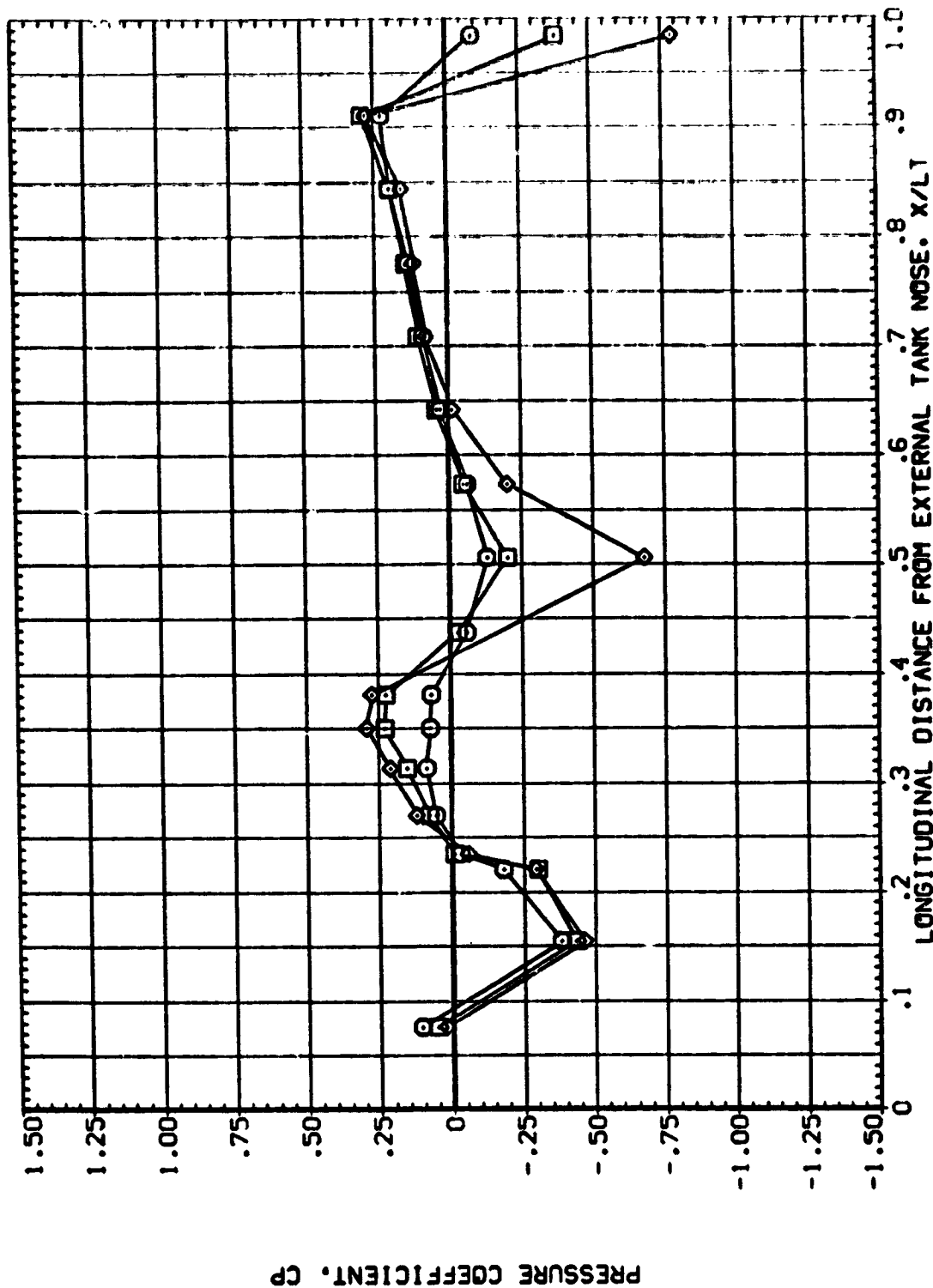
SYMBOL	PMI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF'G	50.000
○	270.000	4.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
□	288.000							IN.	X-SRB	ORBIT	.500
◇	306.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

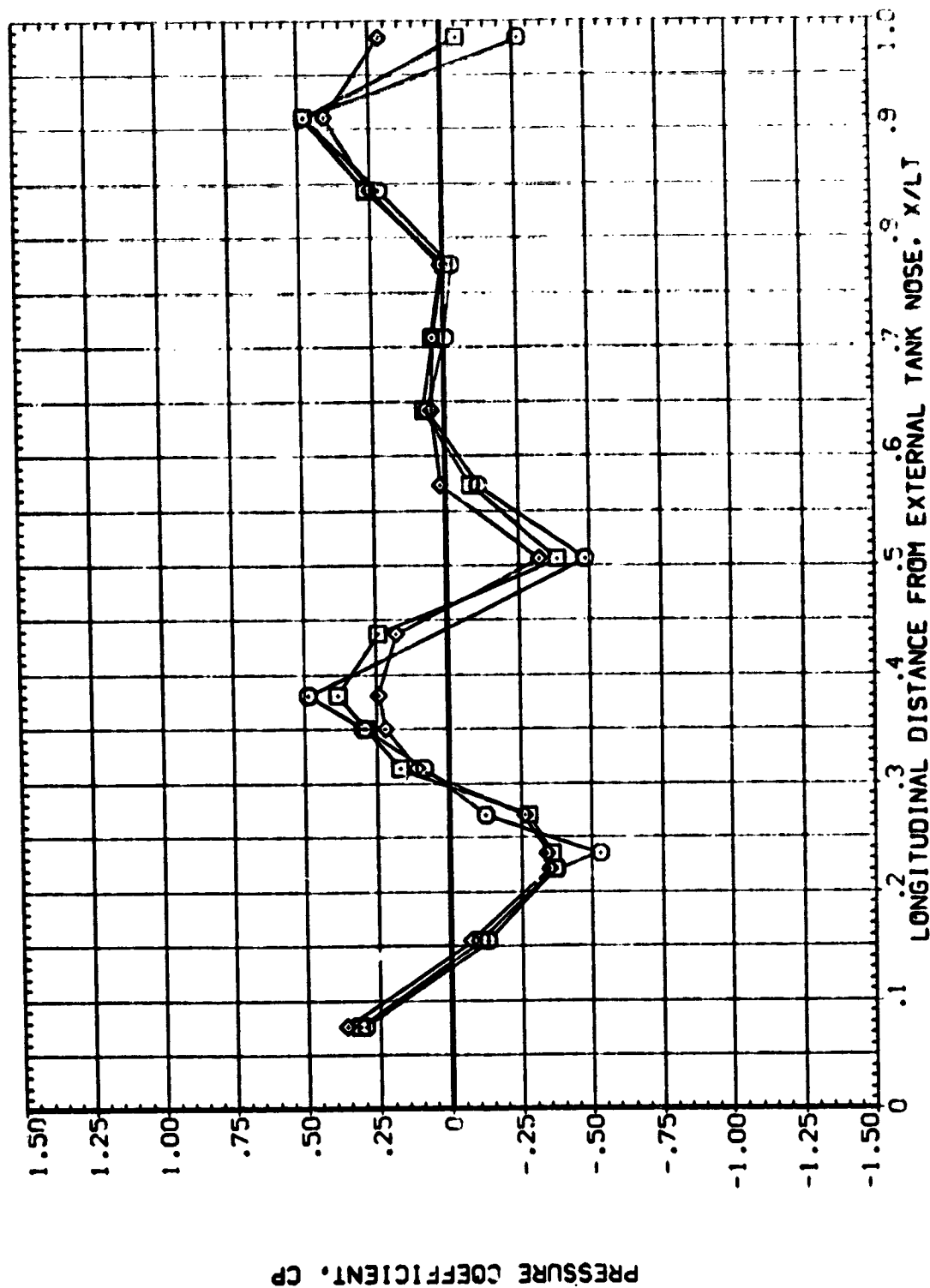
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	SRF	SD. IN.	ALPHA	CONFIS	CONFIS	CONFIS
○	324.000	4.000	.900	5.313	5.313	5.313	IN.	DELTA Z	.140	RUDER	.000
□	342.000			2.549	2.549	2.549	IN.	X-988	.000	DRG INC	.500
◇	360.000			.000	.000	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	X-988	SO. IN.	DELTA Z	CONFIS	RUDER
◇	.000	-4.000	1.250	6.198	5.313	5.313	2.549	IN.	IN.	.000	.000
□	18.000							IN.		.000	.500
◇	36.000							IN.			

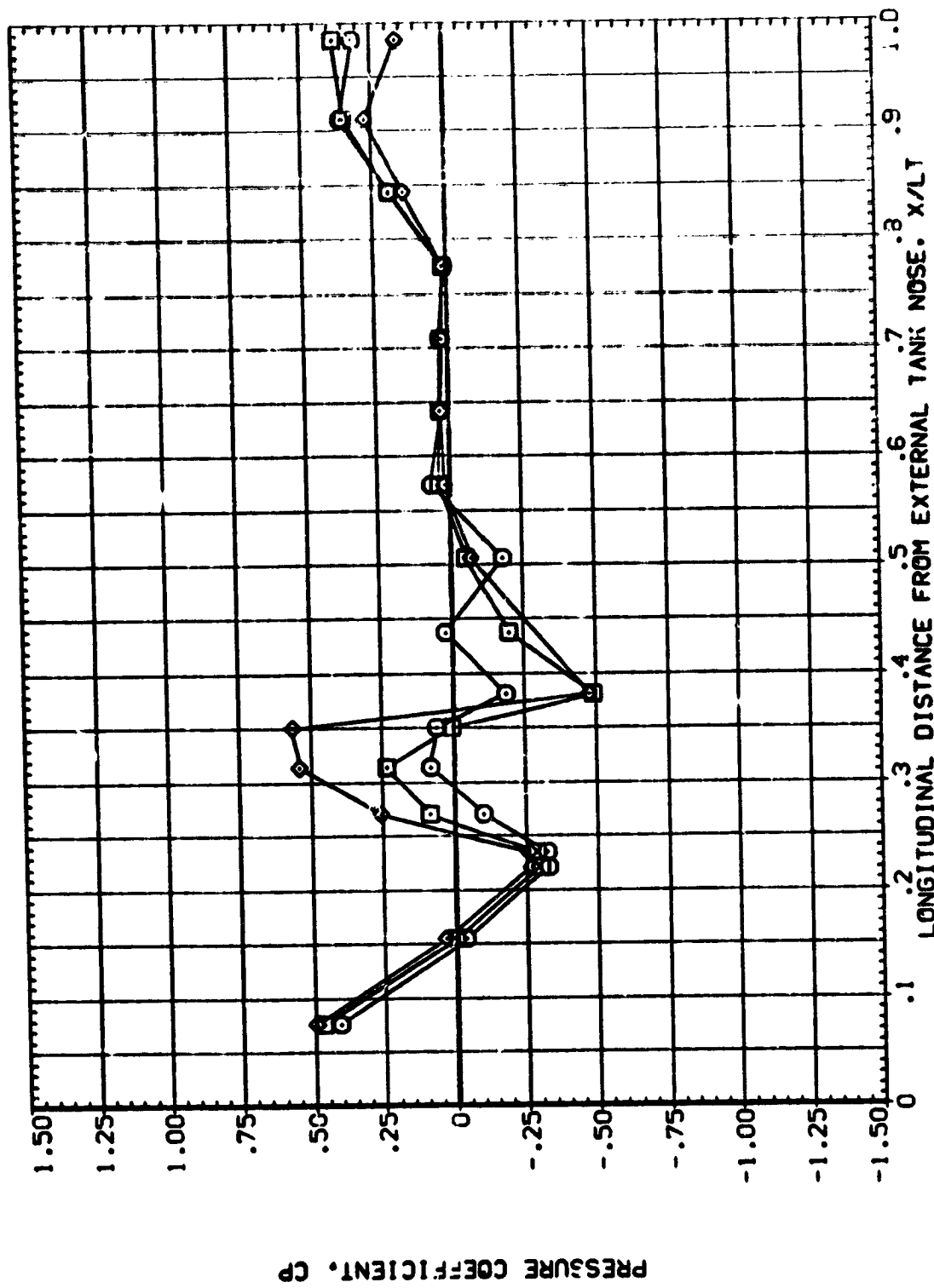


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	EREF	XPRP	50. IN.	ALPHA	CONF IS	50.000
○	54.000	-4.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
□	72.000							IN.	1-S98	DBINC	.500
◇	90.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03  
EXTERNAL TANK(A82T03)

5:180L

**PHI**  
**108.000**  
**126.000**  
**144.000**

**BETA**  
**-4.000**

**MACH**  
**1.250**

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

in.  
szzzzzz

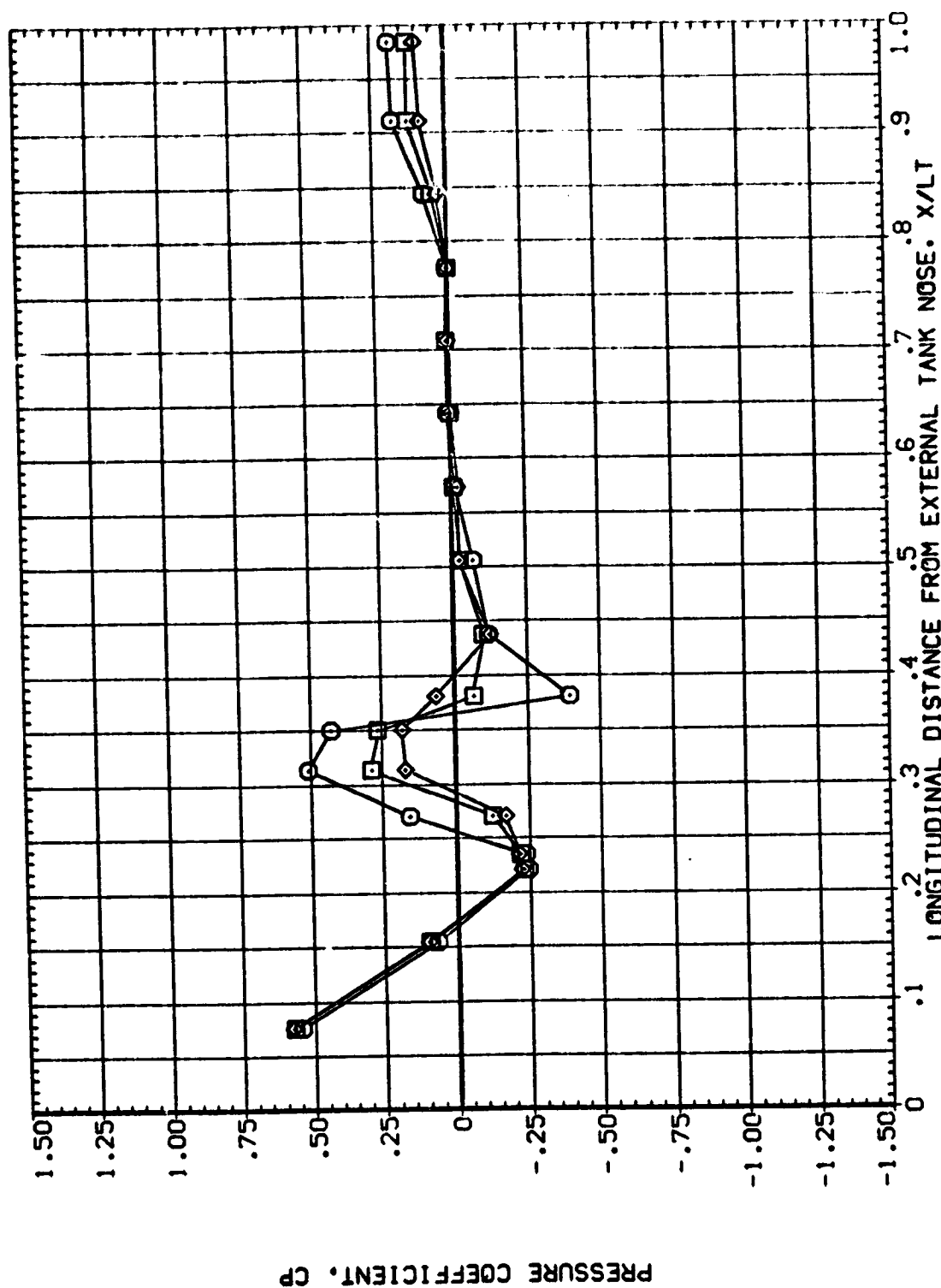
ALPHA  
DELTA Z  
X-SRB

### PARAMETRIC VALUES

005.  
000.  
000.05

005.  
000.  
000.05

005.  
000.  
000.05



**Symbol**   

**PHI**  
**162.000**  
**180.000**  
**198.000**

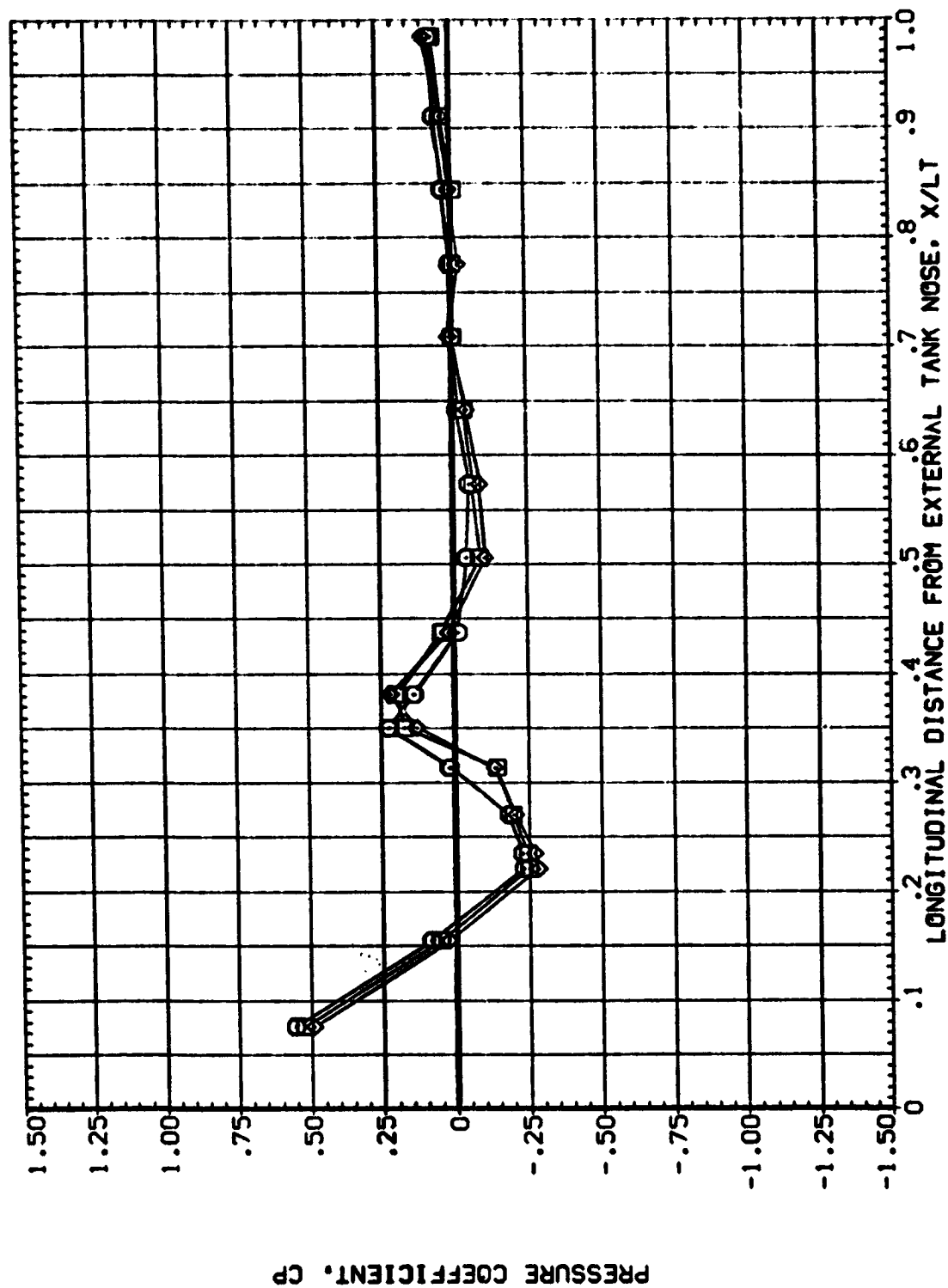
BETA	MACH
-4.000	1.25

REF  
SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP

**gzzzzzz**

ALPHA  
DELTA Z  
X-SRB

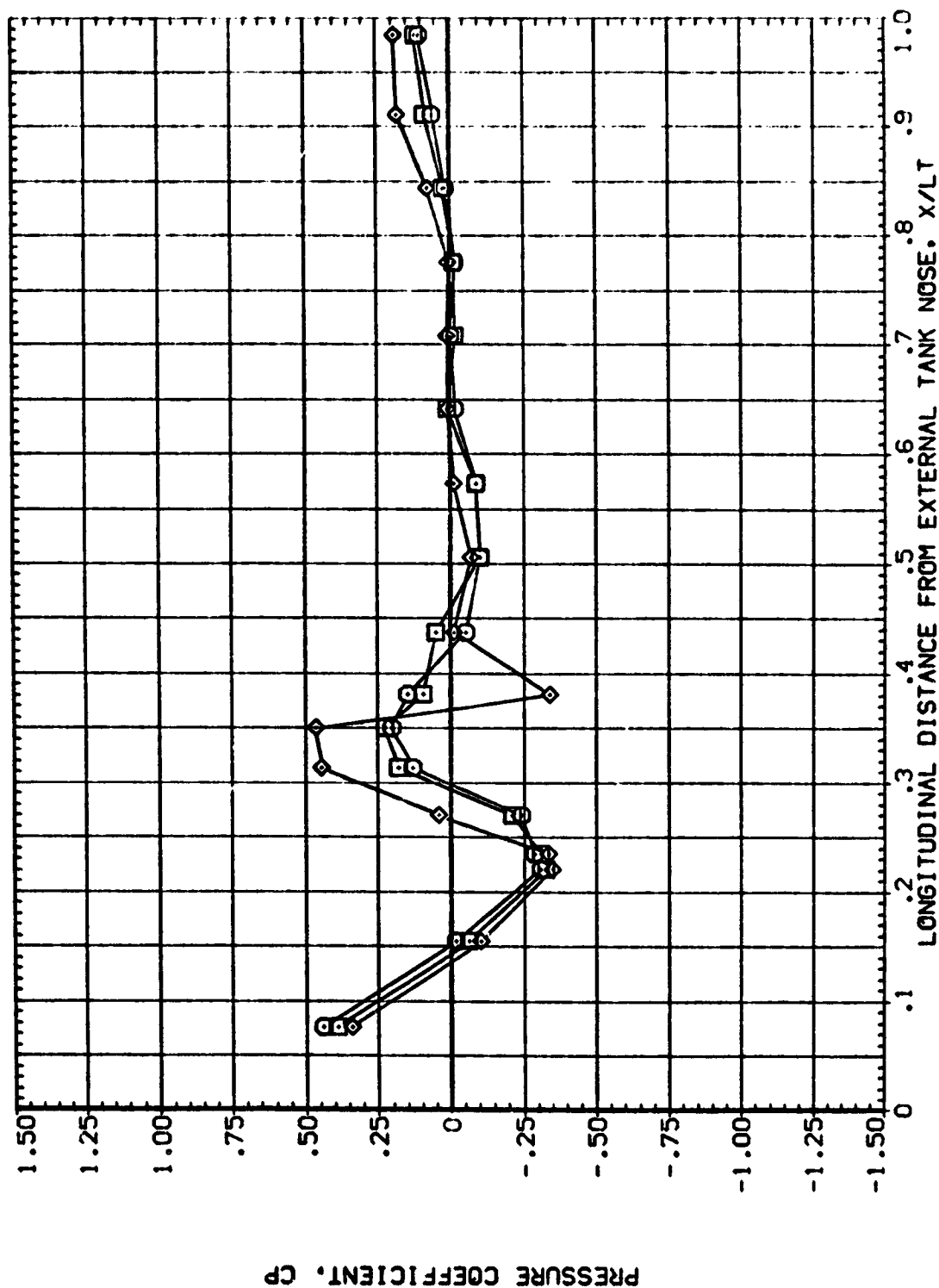
PARAMETRIC VALUES	
5.000	CONFIG
.140	RUDDER
.000	ORIGIN
90.000	
.000	
.500	



03 03/2 S3 T9 ON EXTERNAL TANK DISTRIBUTION PRESSURE

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SG. IN.	ALPHA	CONF IG	90.000
□	216.000	-4.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
◇	234.000							IN.	X-SRB	DRG INC	.500
◇	252.000							IN.			
								IN.			
								IN.			
								IN.			

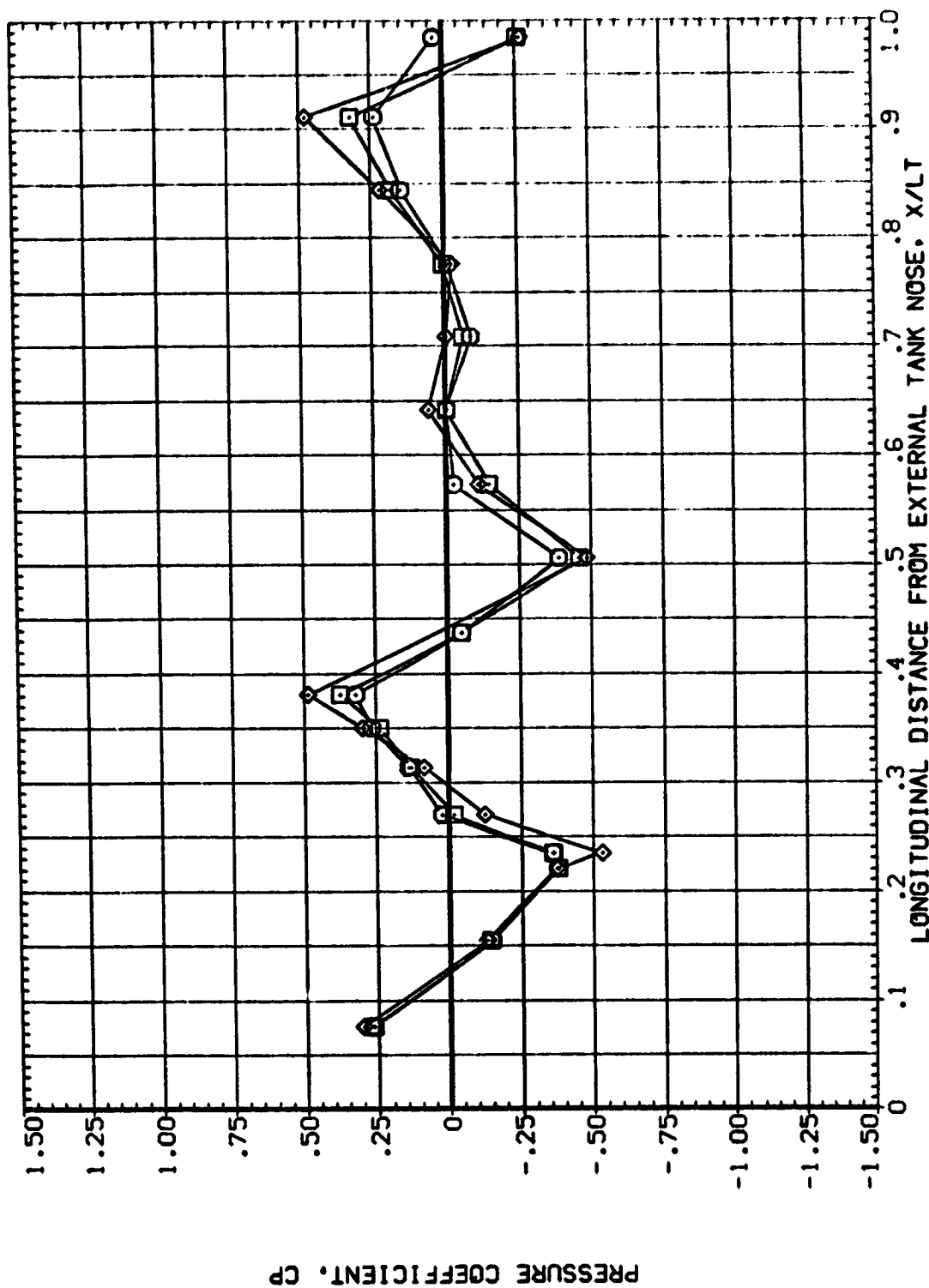


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

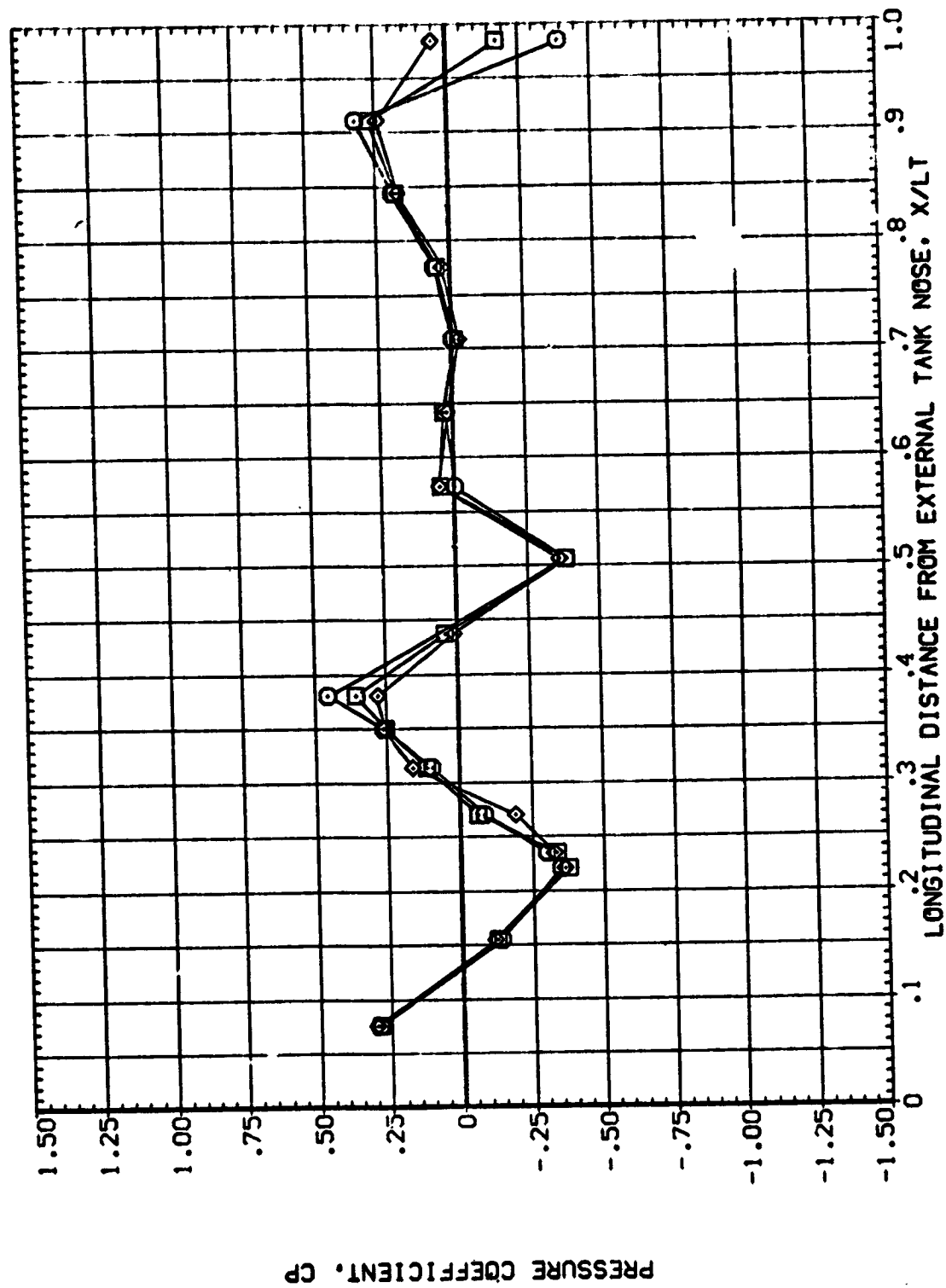
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	ALPHA	CONF IG	
□	324.000	-4.000	1.250	5.198	5.313	5.313	2.549	IN.	DELTA Z	.000	RUDER
◇	342.000							IN.	X-SRB	.000	ORB INC
◇	360.000							IN.		.000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	.000	.000			SREF	6.198	50. IN.	ALPHA	5.000	CONFIG	90.000	
○	18.000		.000	1.250	LREF	5.313	IN.	DELTA Z	.140	RUDER	.000	
□					BREF	5.313	IN.	X-SRB	.000	ORBIT	.500	
◇	36.000				XMRP	2.549	IN.					
					YMRP	.000	IN.					
					ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 54.000  
 72.000  
 90.000

BETA  
 .000  
 MACH  
 1.250

REFERENCE DATA  
 SREF  
 LREF  
 BREF  
 XMRP  
 YMRP  
 ZMRP

5.198  
 5.313  
 5.313  
 2.549  
 .000  
 .000

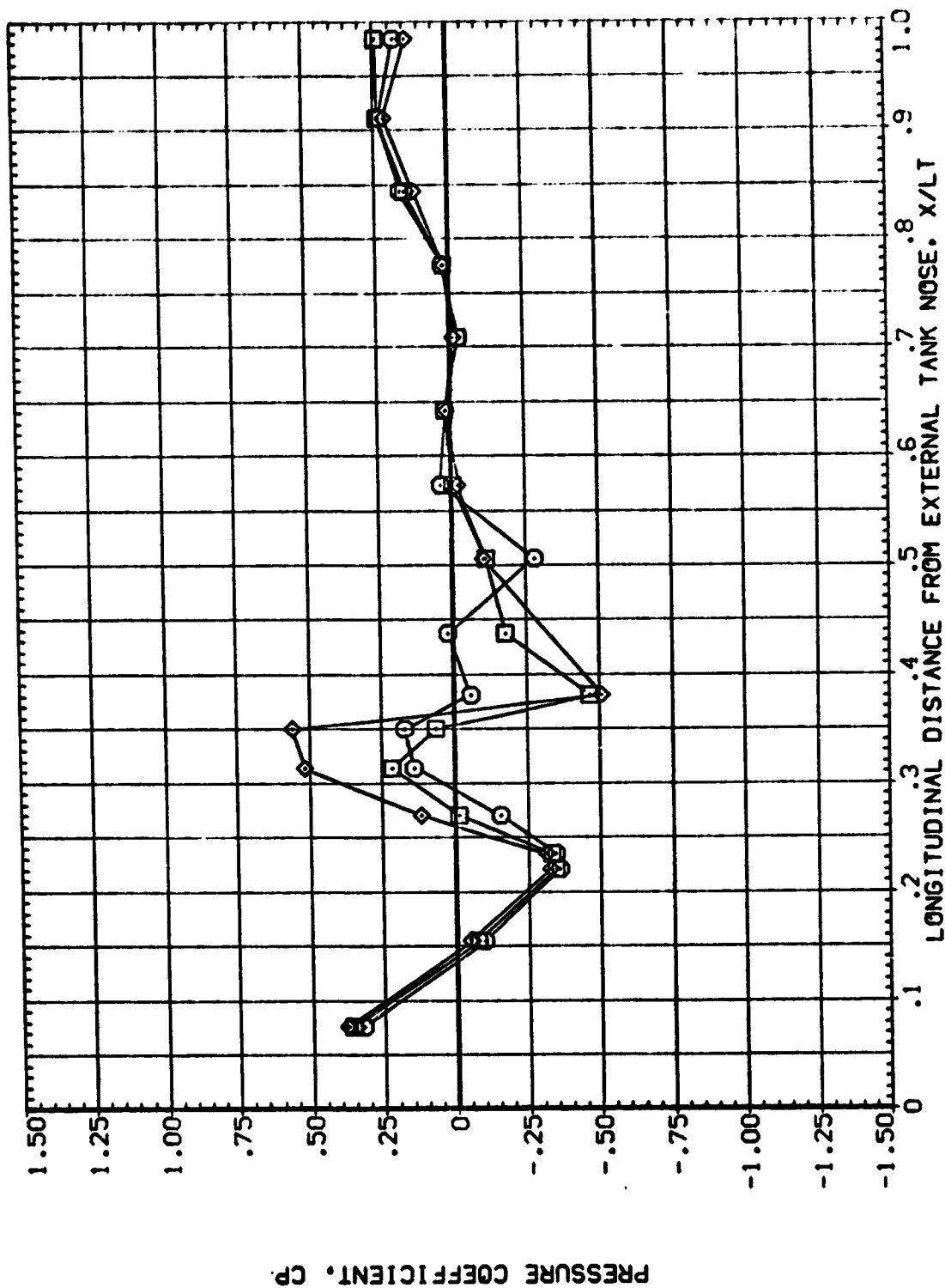
50. IN.  
 IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

5.000  
 .140  
 .000

CONF16  
 RUDDER  
 DRBINC

90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
□  
◇

PHI  
108.000  
126.000  
144.000

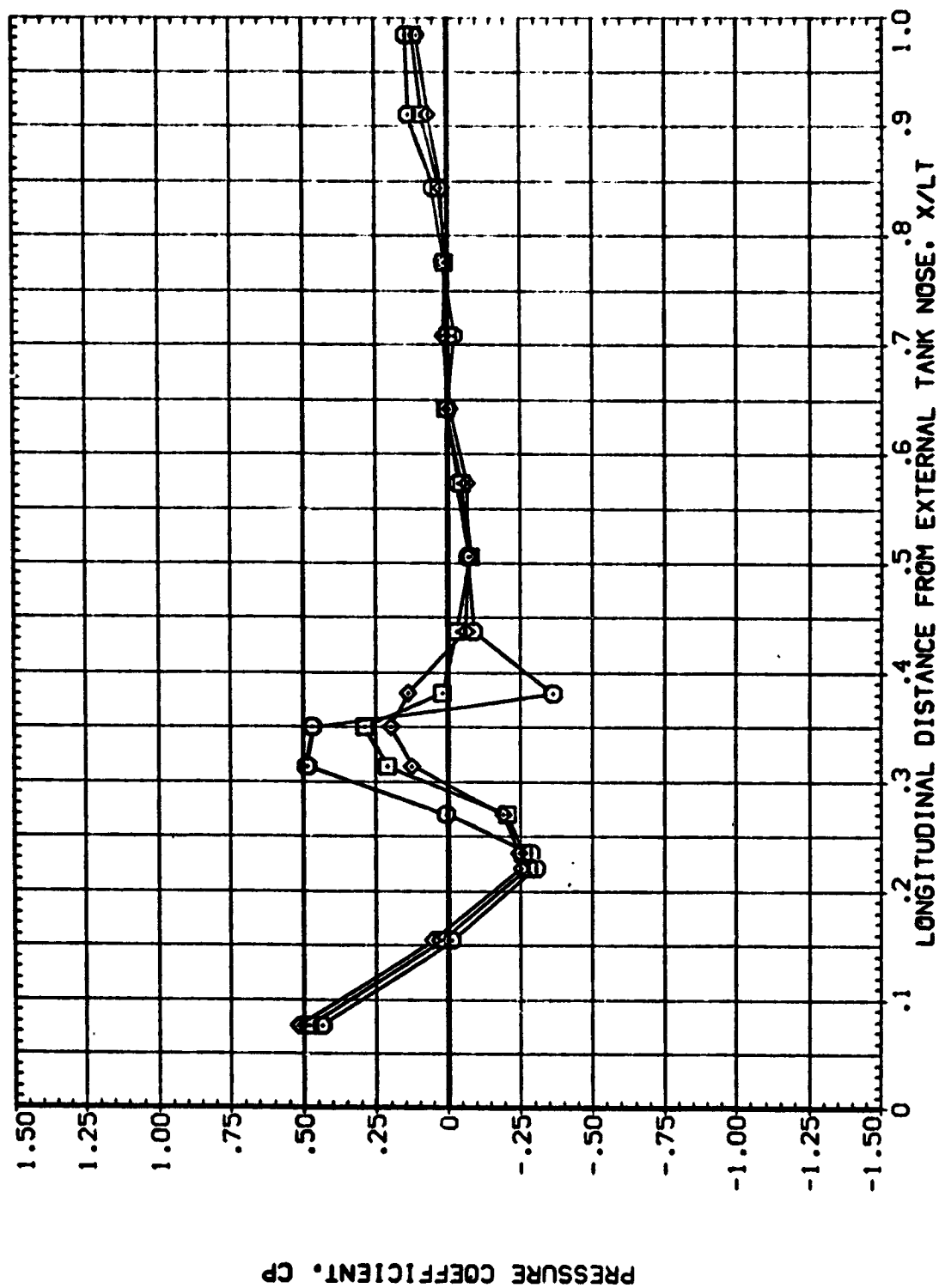
BETA  
.000  
MACH  
1.250

REFERENCE DATA  
SREF 8.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
5.000  
.140  
.000

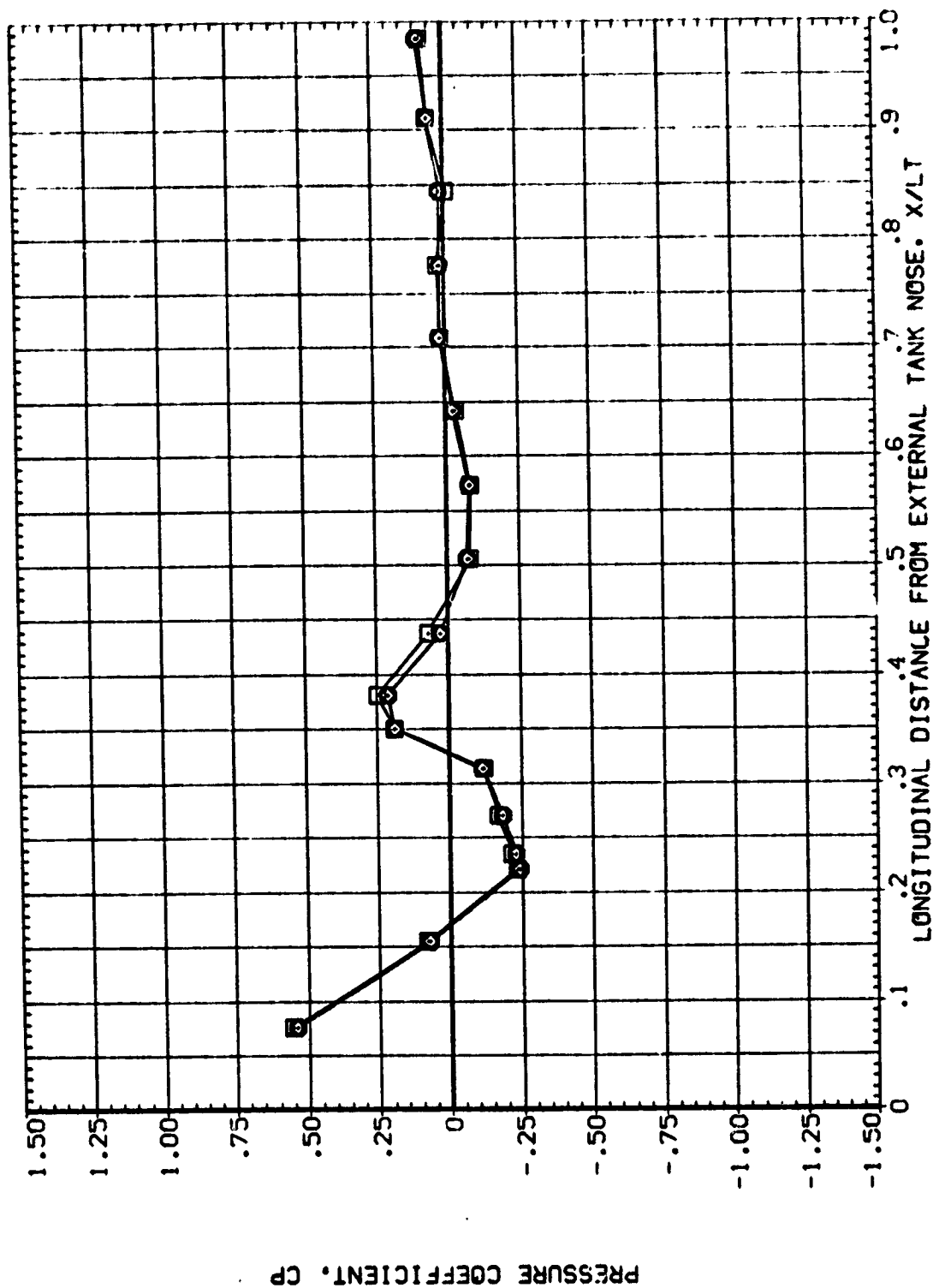
CONFIG  
GLIDER  
ORBINC  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	162.000	180.000			SREF	LREF	BREF	XMRP	6.198	50. IN.	ALPHA	DELTAZ
○	162.000	180.000	.000	1.250	5.313	5.313	2.549	.000	5.000	CONF 13	.140	RUCOR
□	198.000				2.549	.000	.000	.000	.000	ORGINC	.000	ORGINC
◇					.000	.000	.000	.000	.000		.000	.500

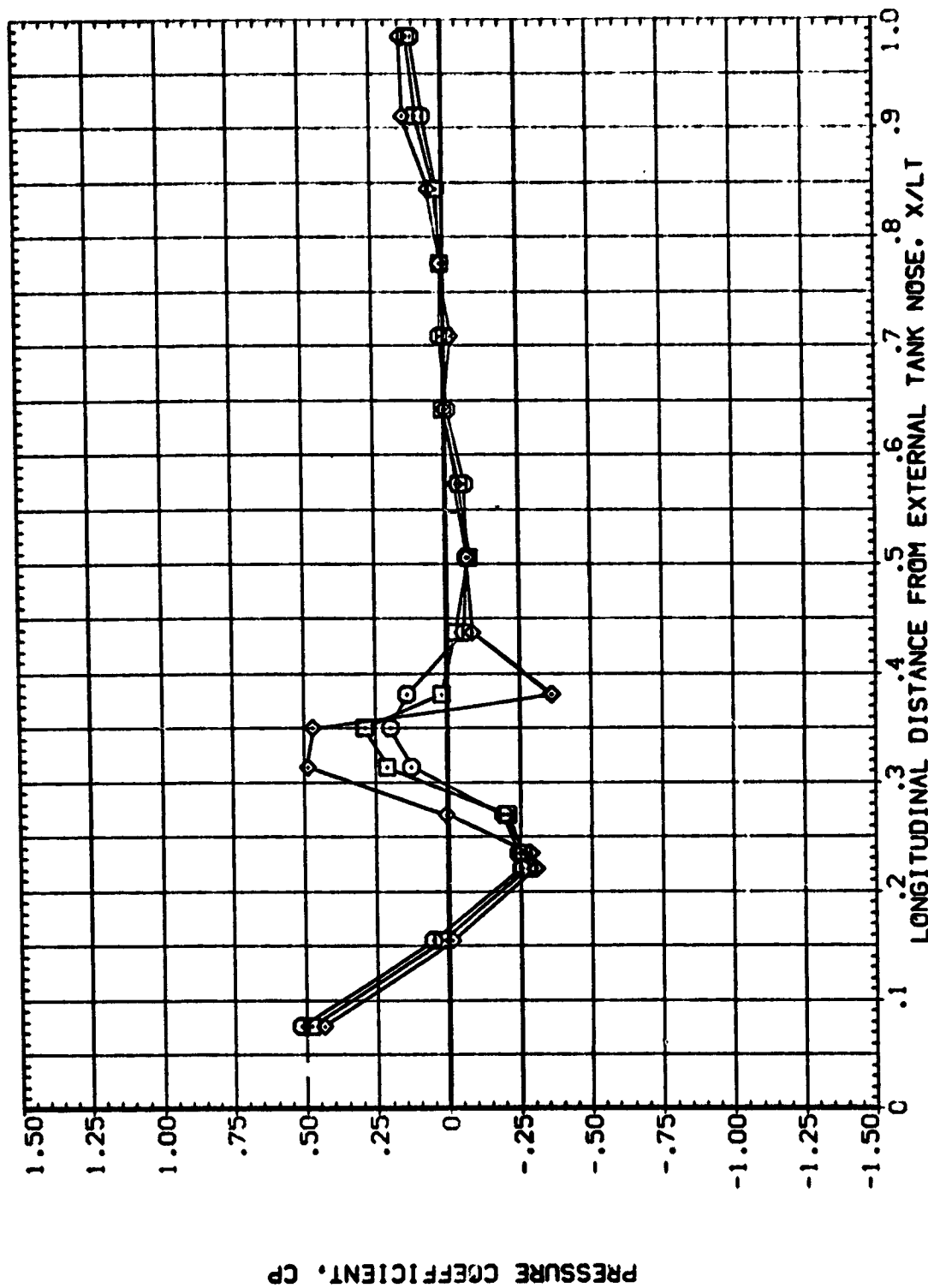


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82TC3)

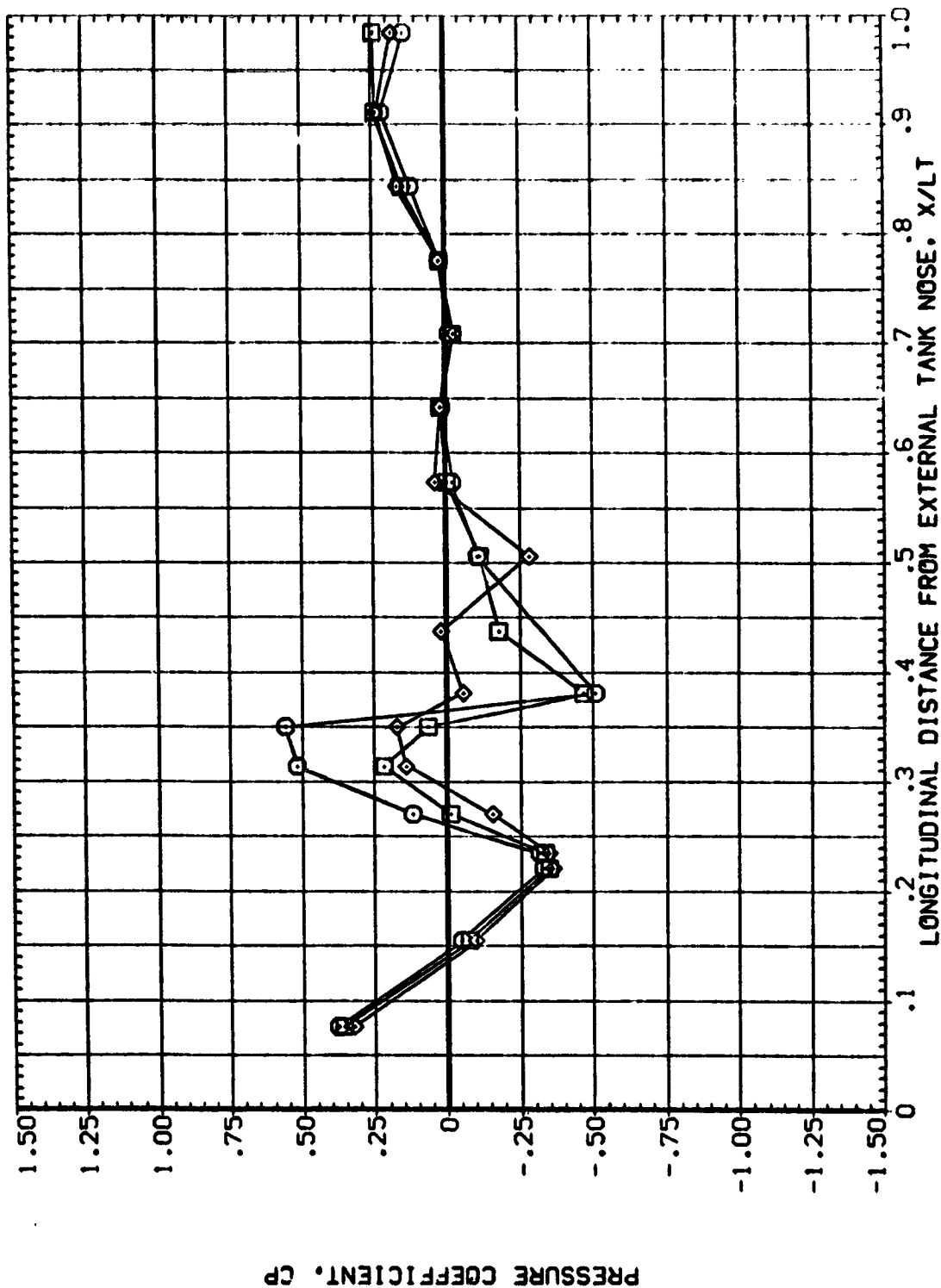
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONFIG	50.000
□	216.000	.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
◇	234.000							IN.	X-SRB	ORBIT	.500
◇	252.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

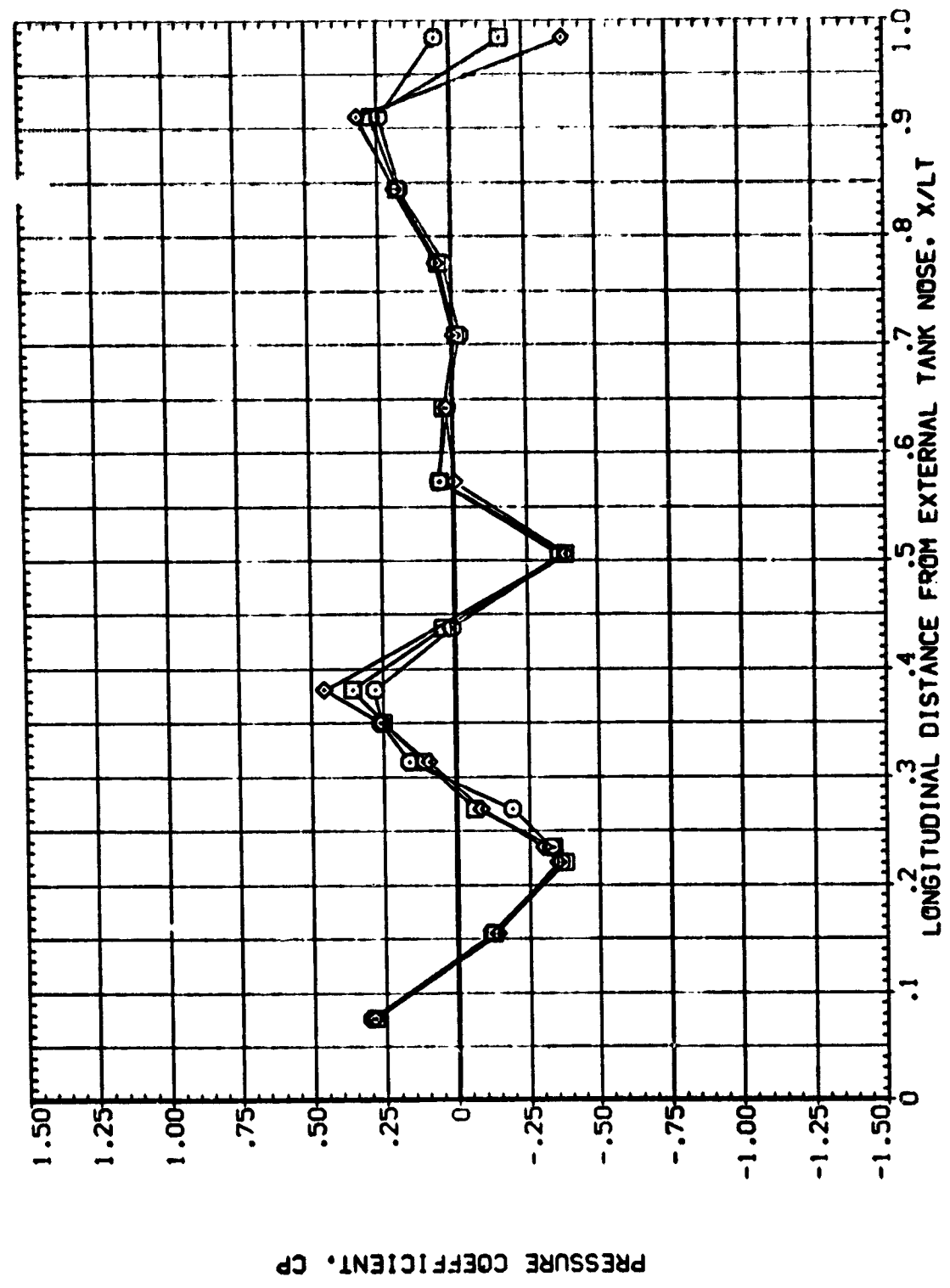
SYMBOL	PHI		BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES				
	270.000	288.000	.000	1.250	SREF	6.198	SO. IN.	ALPHA	5.000	CONF IG	90.000
○					LREF	5.313	IN.	DELTA Z	.140	PLODER	.000
□					BREF	5.313	IN.	X-SRB	.000	ORBITAL	.500
◇					XPRP	2.549	IN.				
					YPRP	.000	IN.				
					ZPRP	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

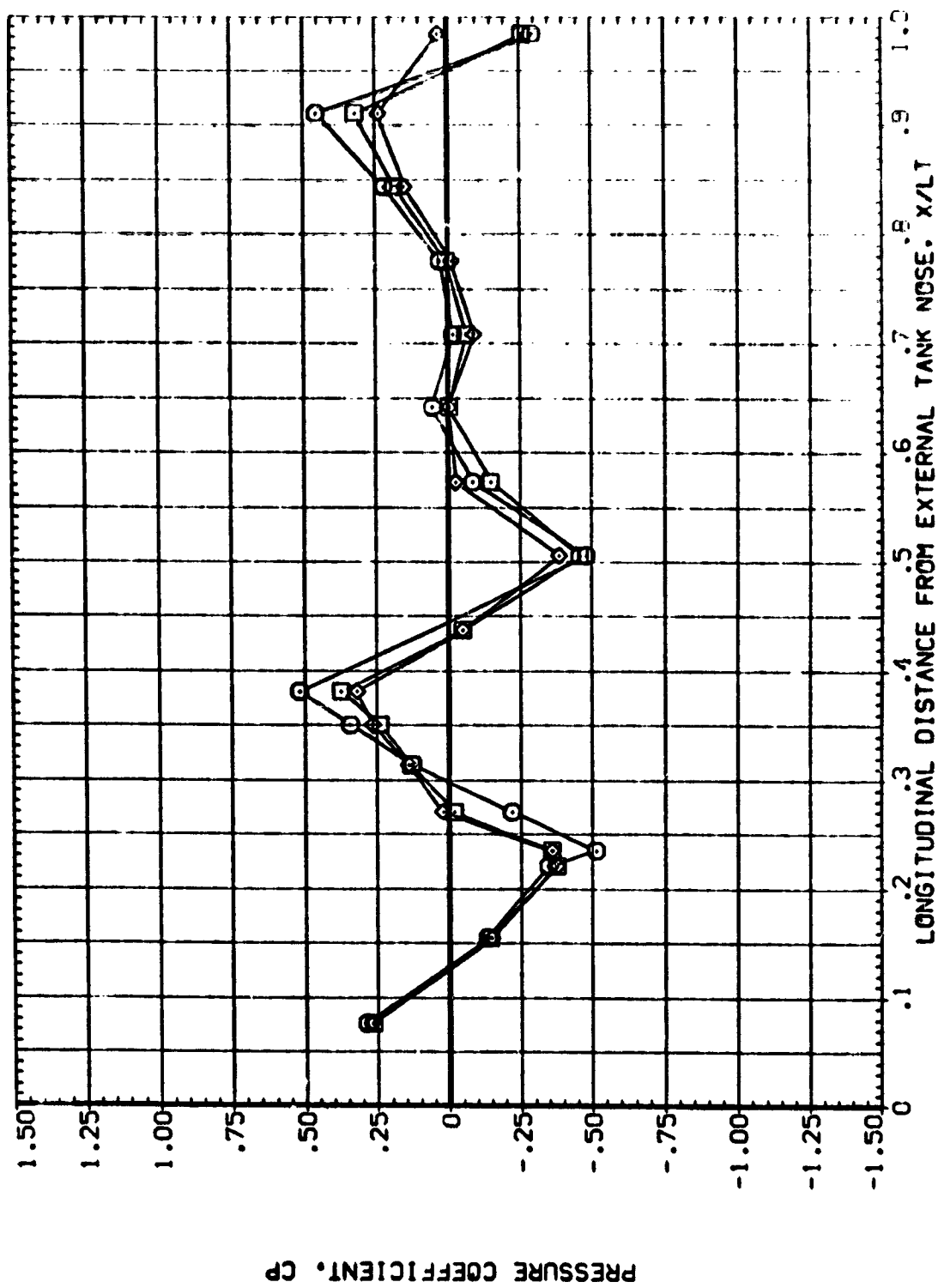
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	6.198	5.313
○	324.000	.000	1.250							5.000	.140
□	342.000									.000	.000
◇	360.000									.000	.500
										ALPHA	DELTA Z
										X-SFB	ORBIT INC



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

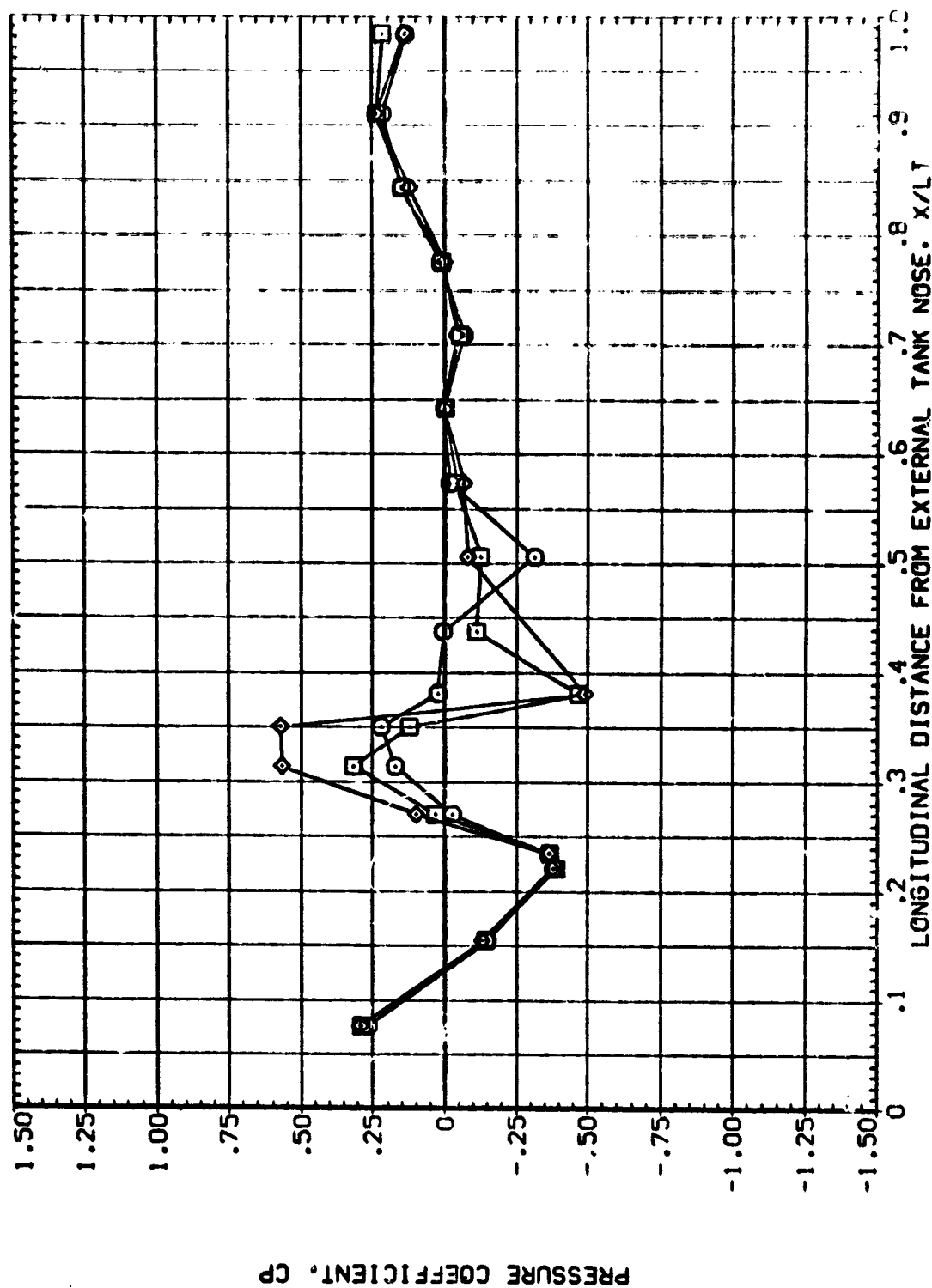
SYMBOL	PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
	0.000	18.000	4.000	1.250			SREF	8.198	90. IN.	DELTA Z	5.000	CONF IG
□	36.000						LREF	5.313	IN.	X-SRB	.140	ALDOER
◇							BREF	5.313	IN.		.000	ORBITAL
							YREF	2.549	IN.			.500
							ZREF	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

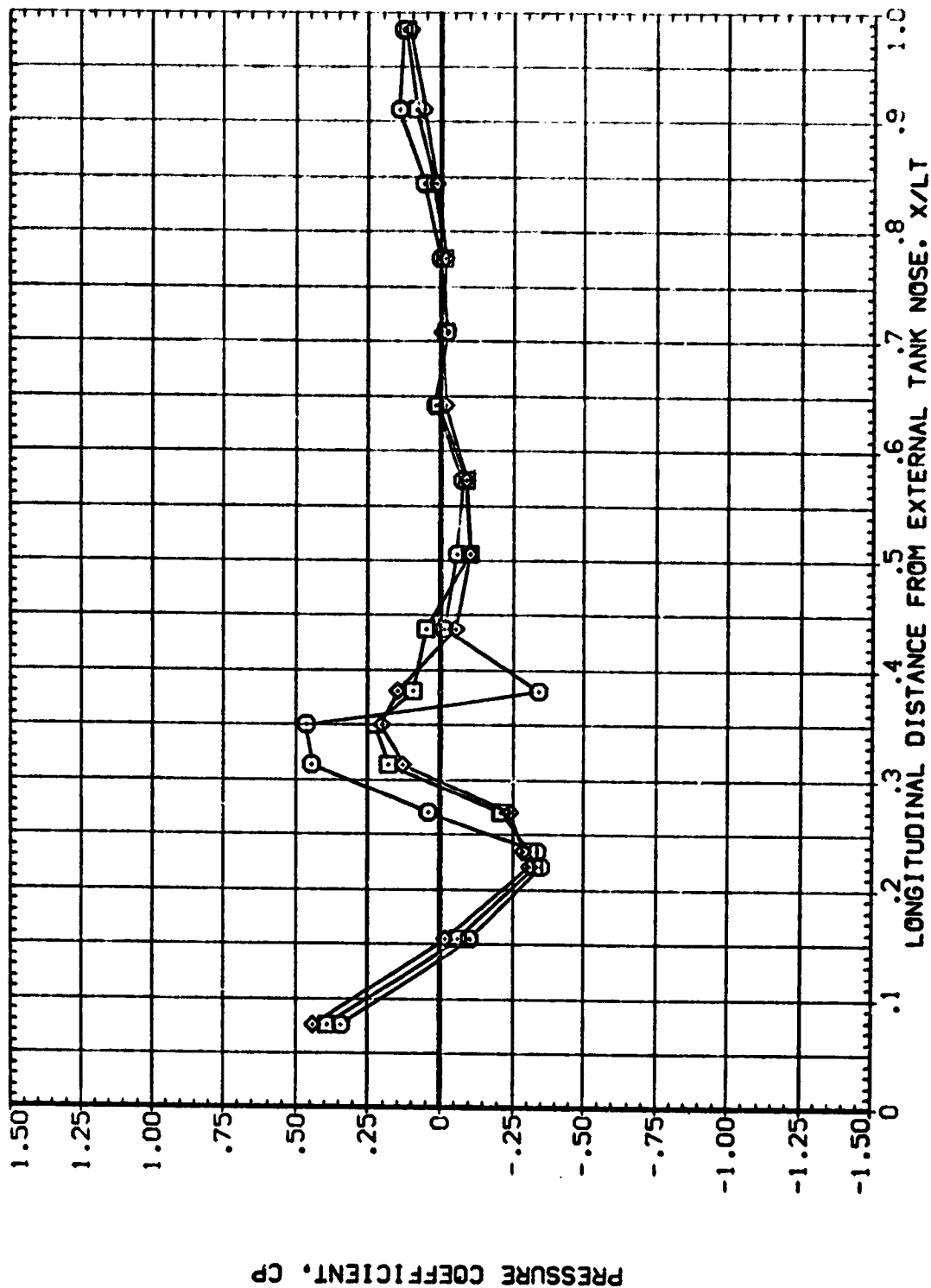
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YREF	SD, IN.	ALPHA	CONFUS	90,000
□	54,000	4,000	1,250	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
◇	72,000							IN.	Y-SRB	90,000	.000
◇	90,000							IN.		90,000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIG	90.000
○	108.000	4.000	1.250	6.199	5.313	5.313	2.549	IN.	DELTA Z	5.000	CONFIG
□	126.000							IN.	X-SRB	.140	RUDDER
◇	144.000							IN.		.000	ORBIT
								IN.		.000	ORBIT
								IN.		.500	ORBIT



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
□  
◇

PMI  
162.000  
180.000  
198.000

BETA  
4.000

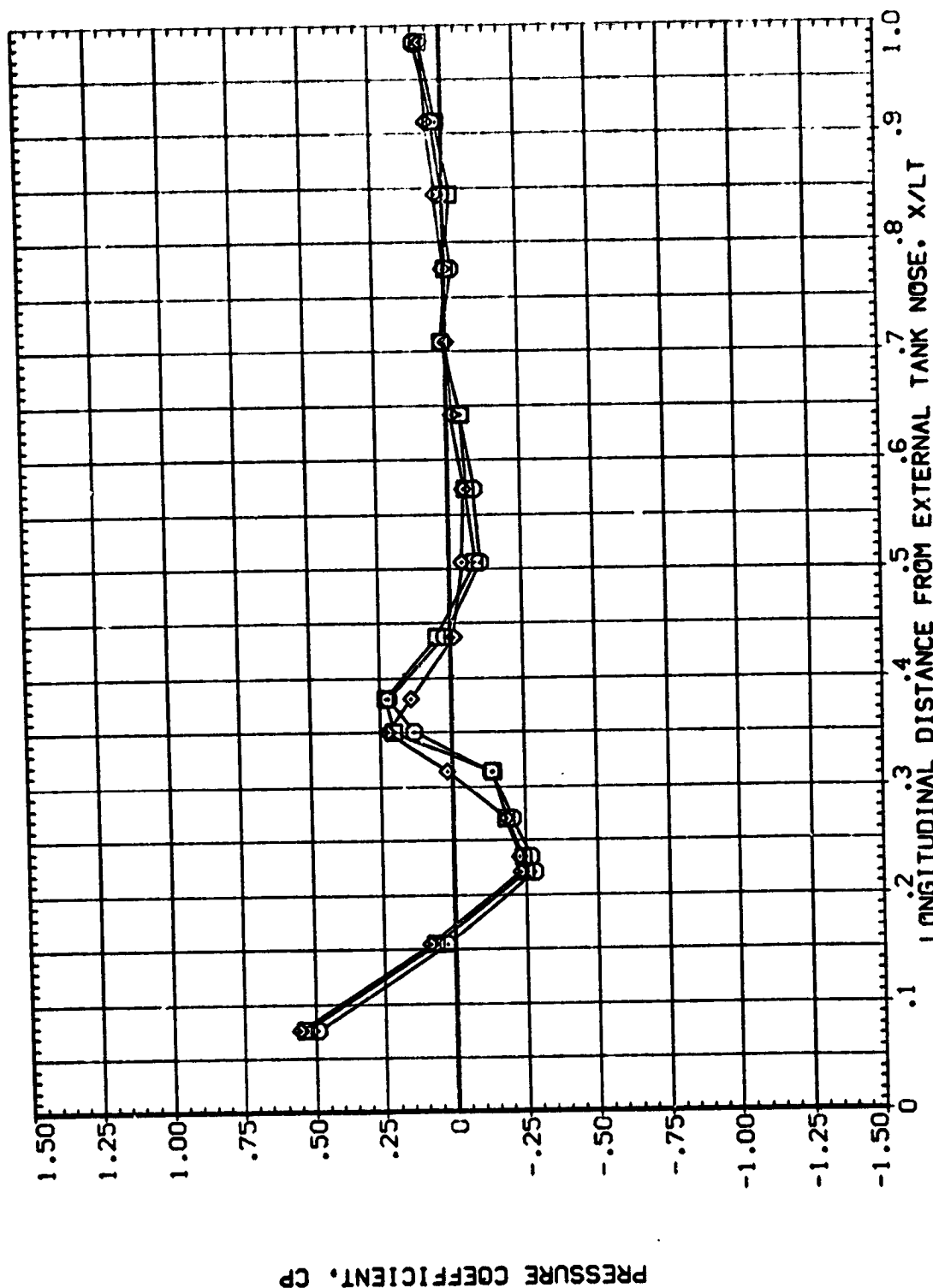
MACH  
1.250

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
5.000 CONF IG  
.140 RUDDER  
.000 ORBINC  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

## MSEC 567(1A32F) T9 S3/2 S3/2 03

**PHI**  
**216.000**  
**234.000**  
**252.000**

**BETA**      **MACH**  
**4.000**      **1.250**

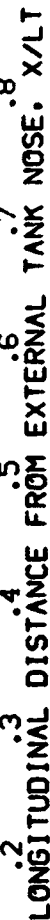
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SREF
LREF
BREF
XMRP
YMRP
ZMRP

92222222

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES	
5.000	CONFIG
.140	RUDDER
.000	ORGINC

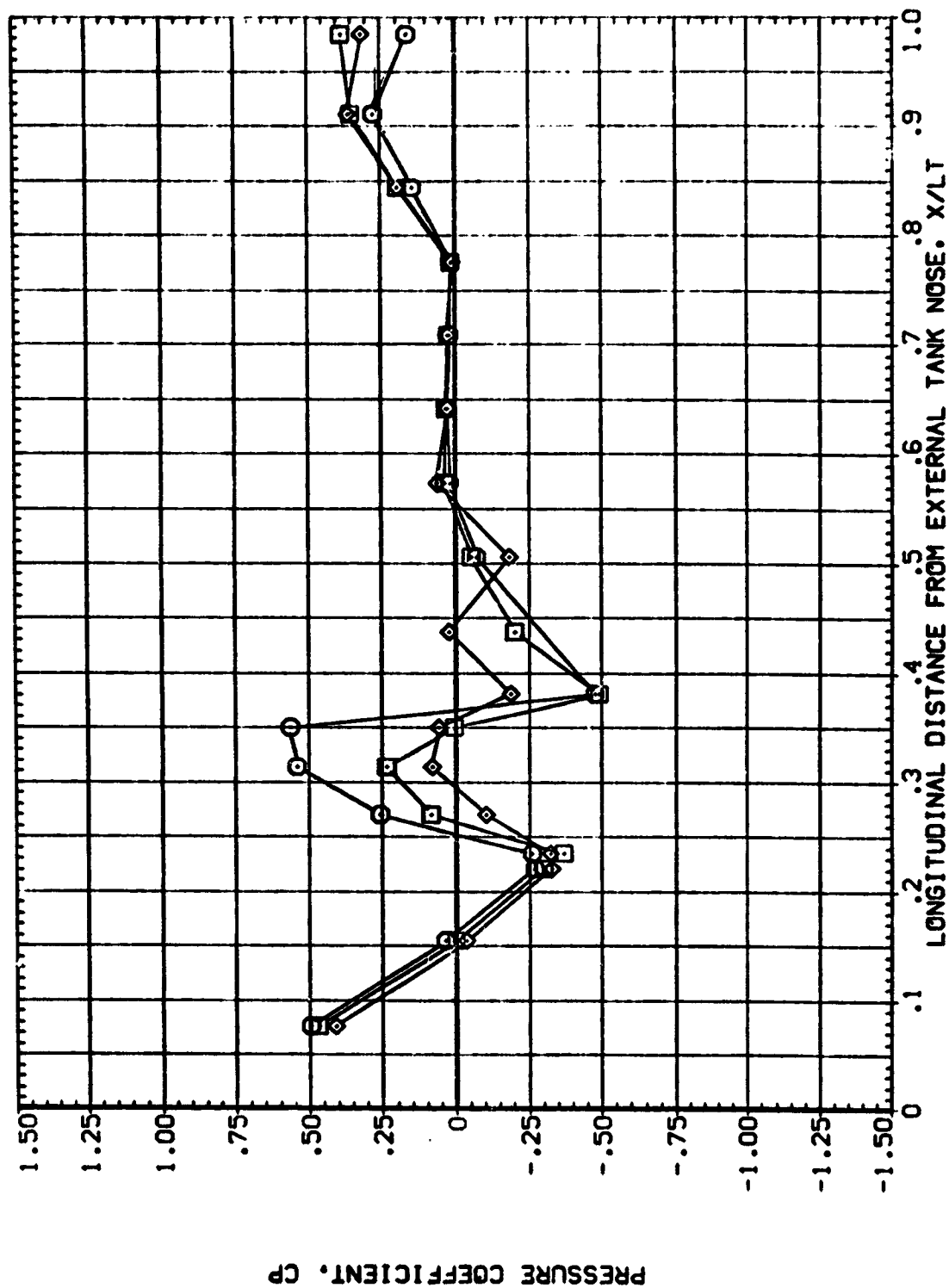
005.  
000.  
90.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YREF	50. IN.	ALPHA	CONF 16	90.000
○	270.000	4.000	1.250	6.198	5.313	5.313	2.548	IN.	DELTA Z	RUDER	.000
□	286.000							IN.	X-SRB	.000	.500
◇	306.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

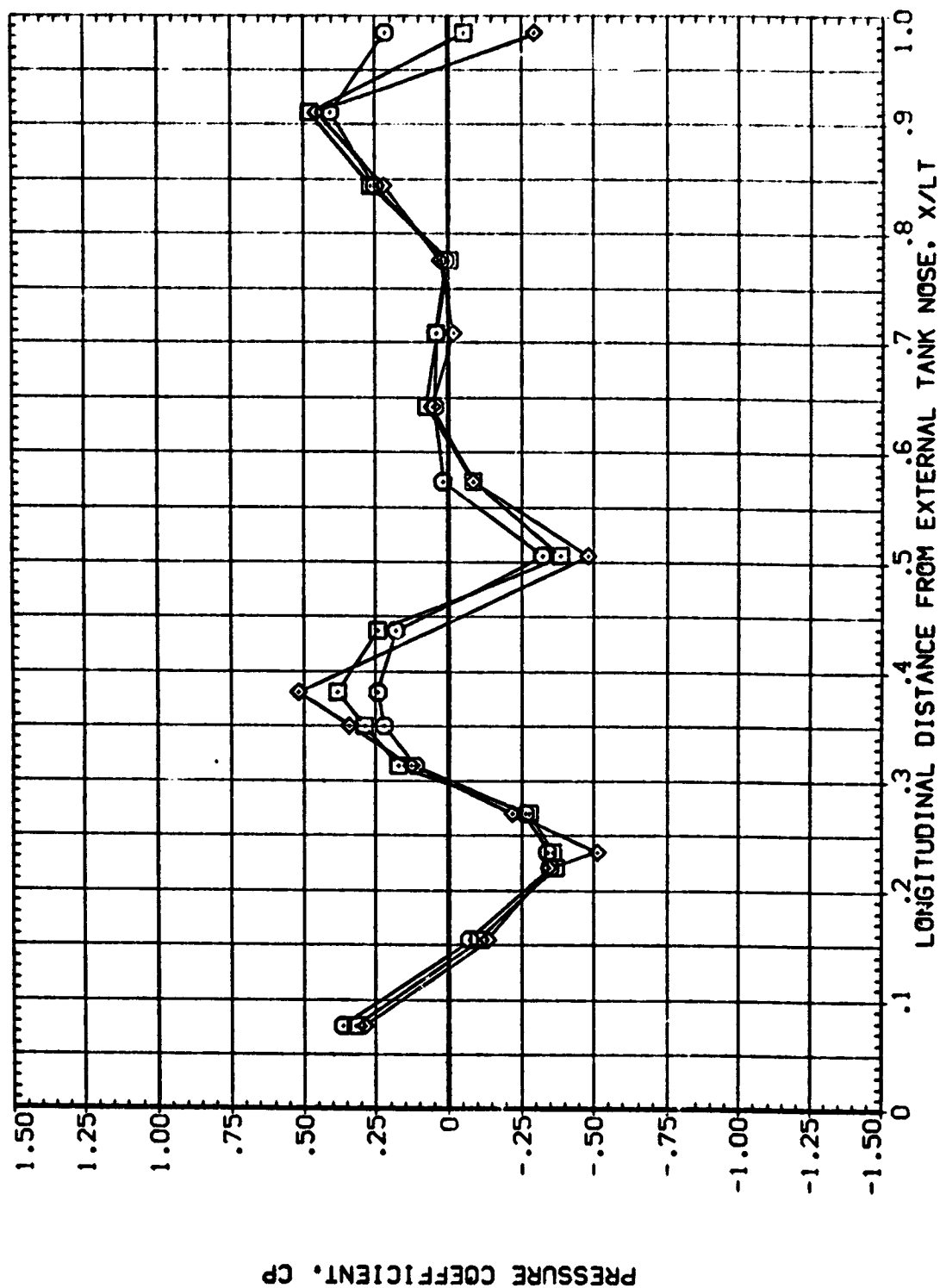
## MSFC 567(1A32F) T9 S3/2 S3/2 03

**SYMBOL**   

PHI	BETA	MACH
324.000	4.000	1.25
342.000		
360.000		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

PARAMETRIC VALUES		
ALPHA	5.000	CONFIG
DELTA Z	.140	RUDDER
X-SRB	.000	GRB INC
		90.000
		.000
		.500

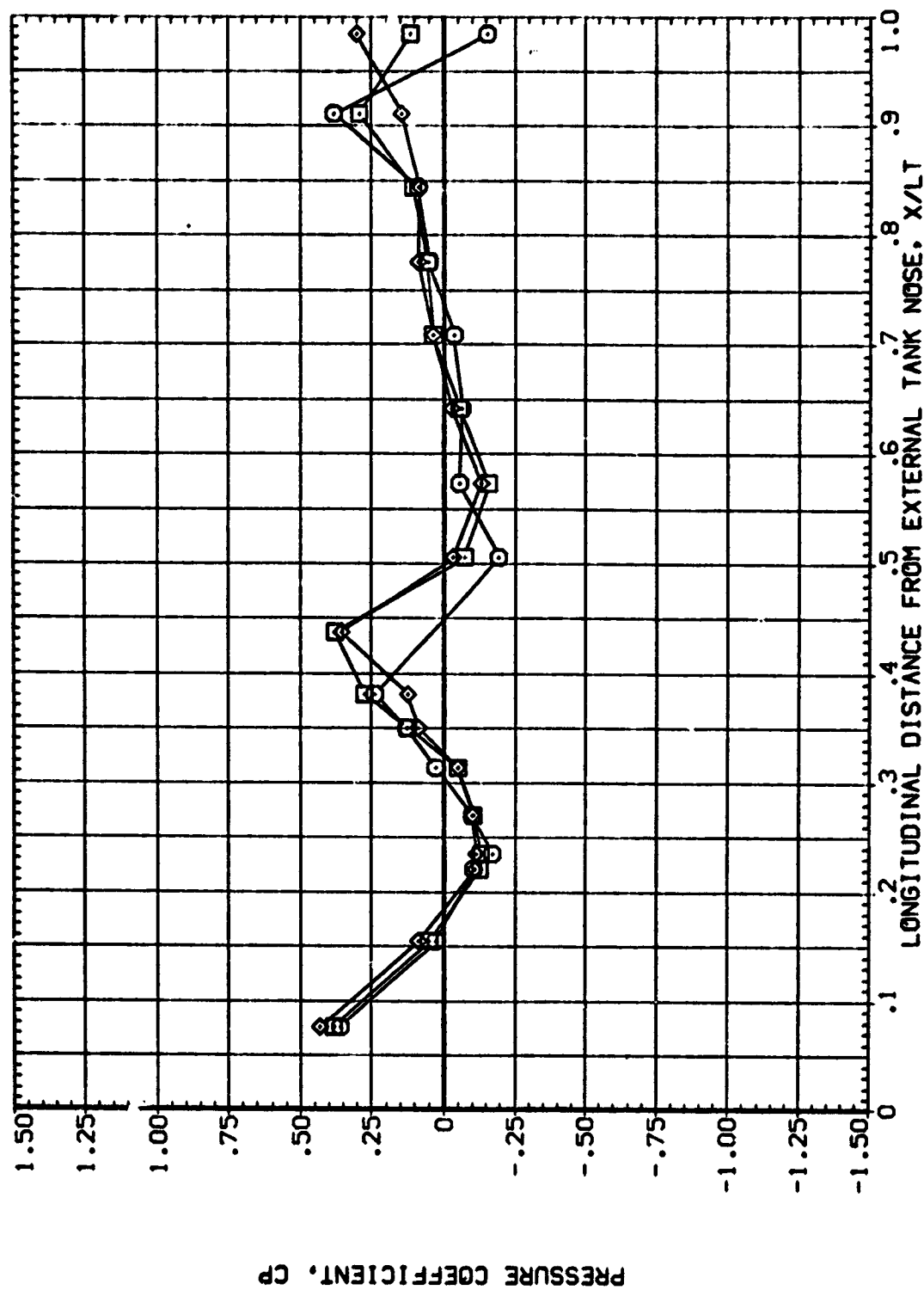


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SO. IN.	IN.	IN.	IN.
○	.000	-4.000	1.960	6.198	5.313	5.313	2.549	50.000	5.000	.000	90.000
□	18.000								.140	RCDER	.000
◇	36.000								.000	ORGINC	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○ □ ◇

PHI  
 54.000  
 72.000  
 90.000

BETA  
 -4.000

MACH  
 1.960

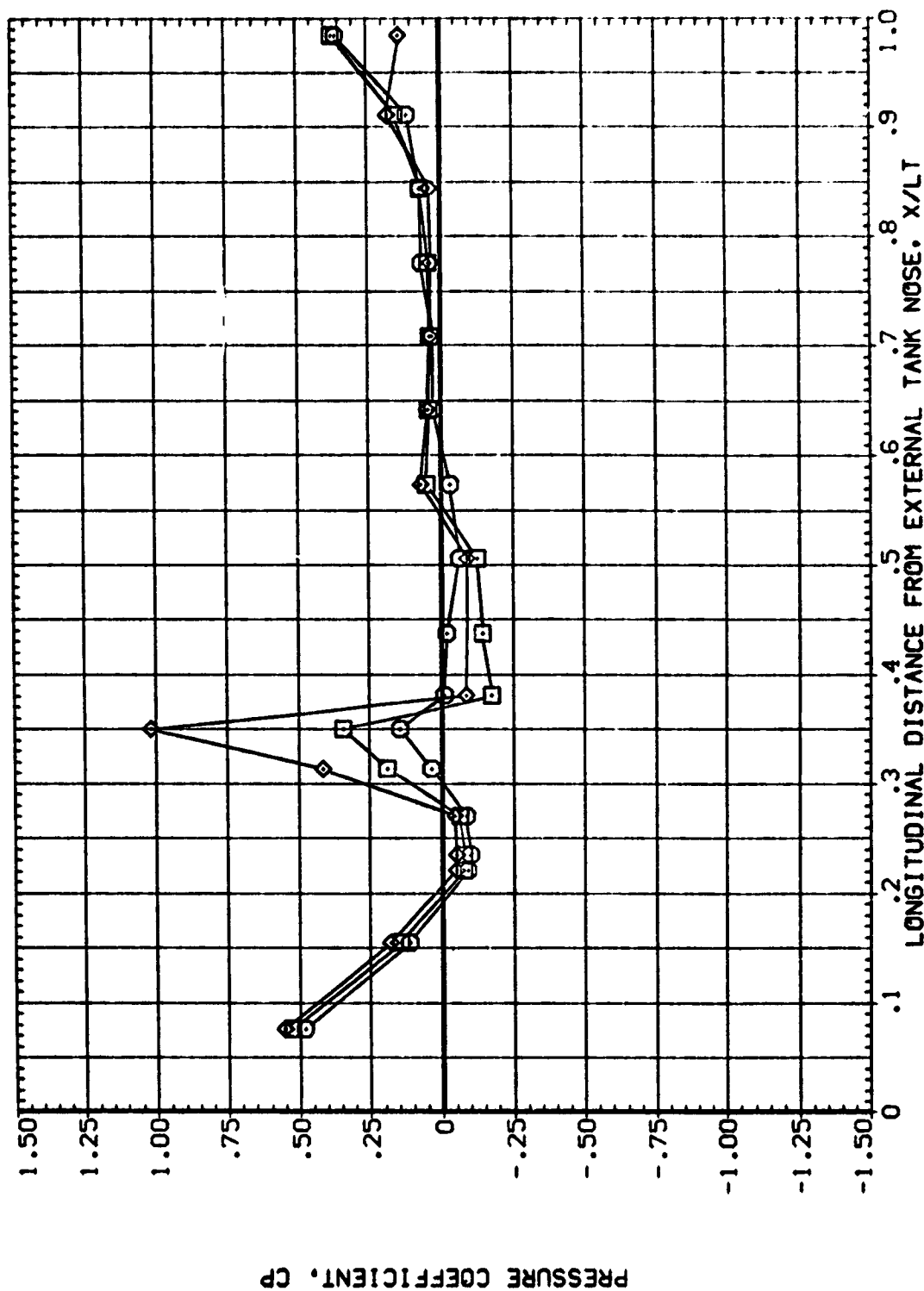
REFERENCE DATA  
 SPREF 6.198  
 LPREF 5.313  
 BRPF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 5.000 CONF16  
 .140 RUDDER  
 .000 ORBINC

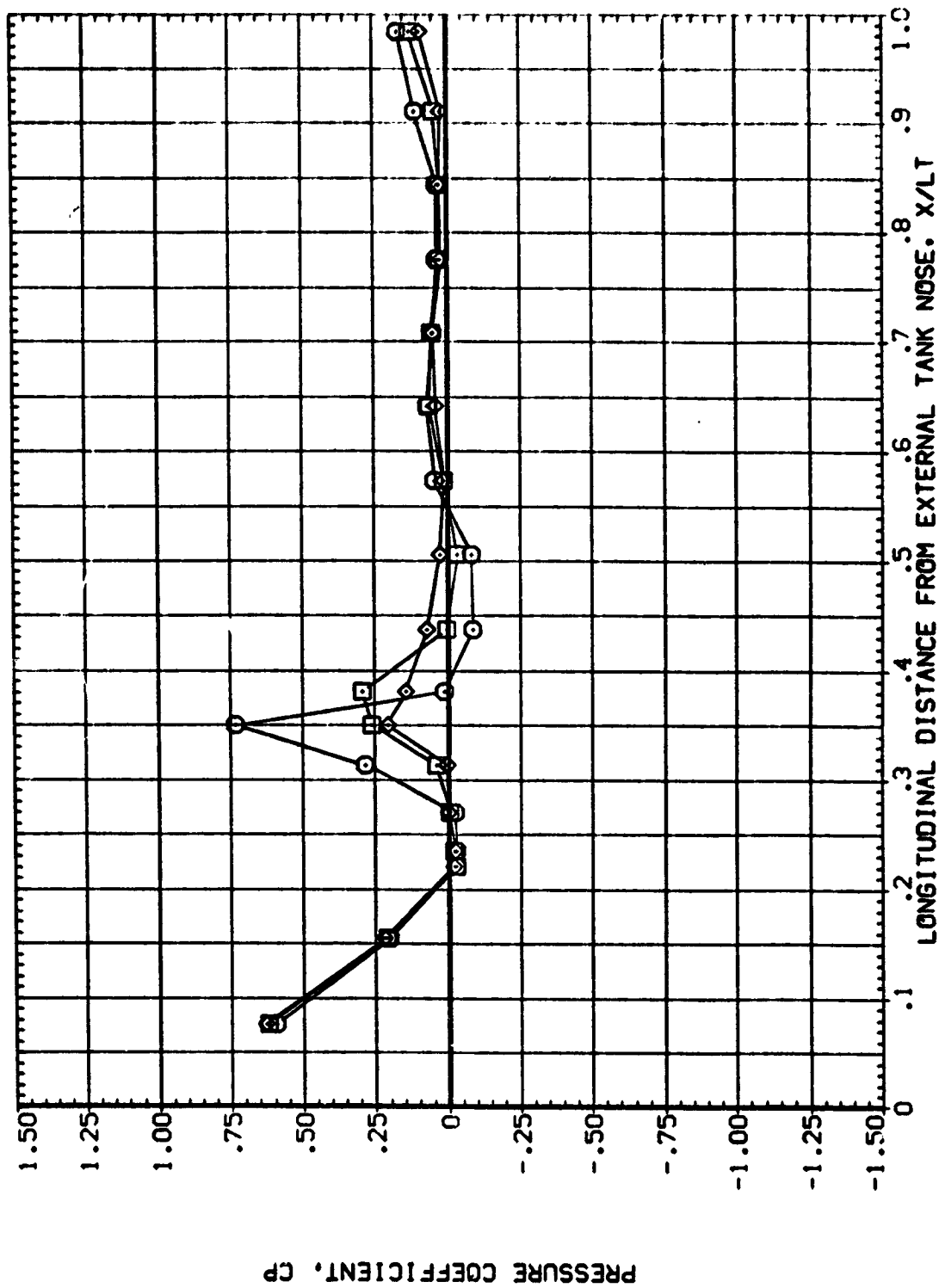
90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

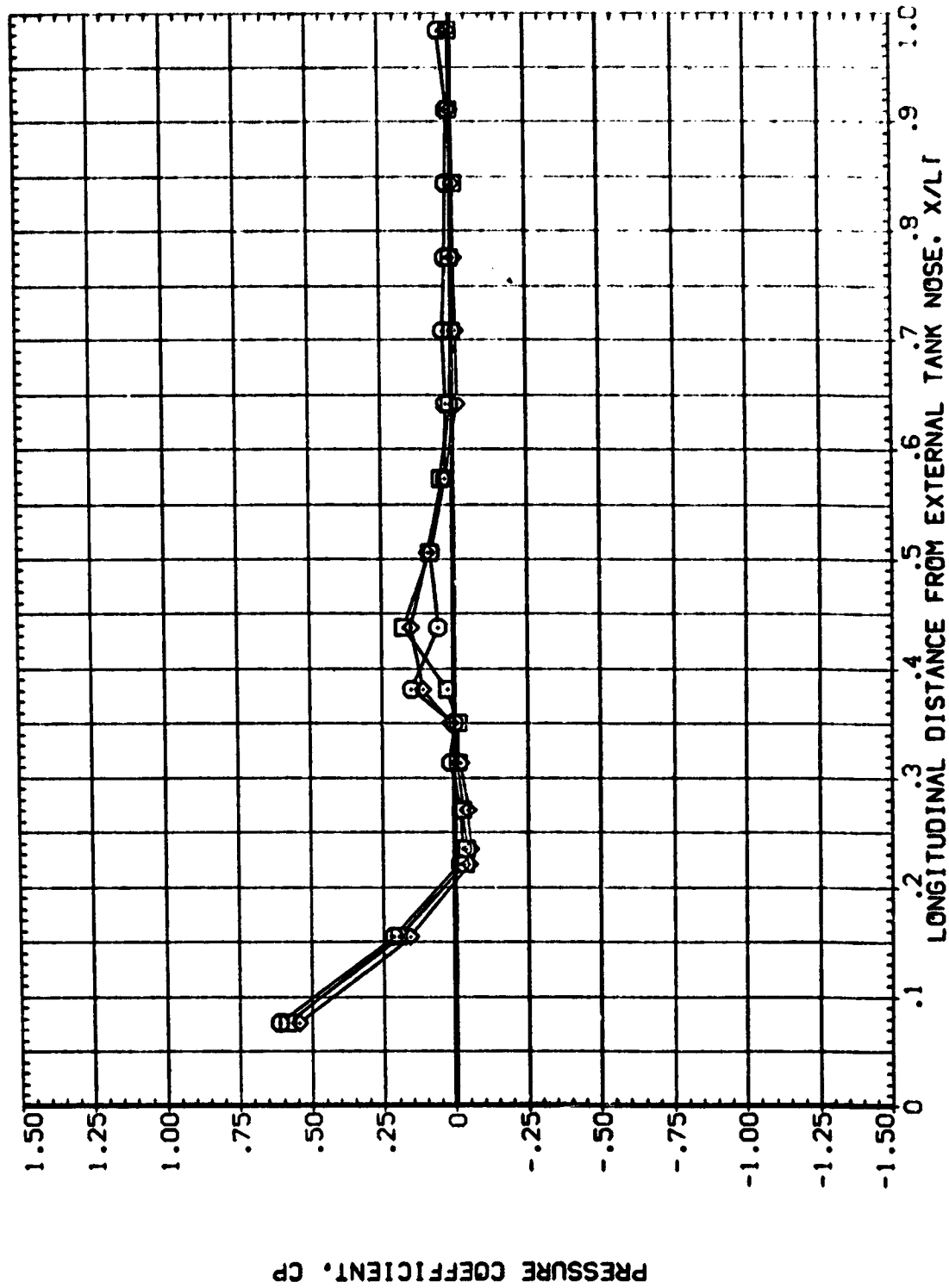
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○											6.198									5.000			90.000
□											5.313									.140			.000
◇											5.313									.000			.500
											2.549												
											.000												
											.000												
											.000												



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	50. IN.	ALPHA	CONFIG	90.000
□	162.000	-4.000	1.960	5.313	5.313	2.549	.000	IN.	DELTA Z	RUDDER	.000
◇	180.000			2.549	.000	.000	.000	IN.	X-SRB	ORBITAL	.500
◇	198.000			.000	.000	.000	.000	IN.			

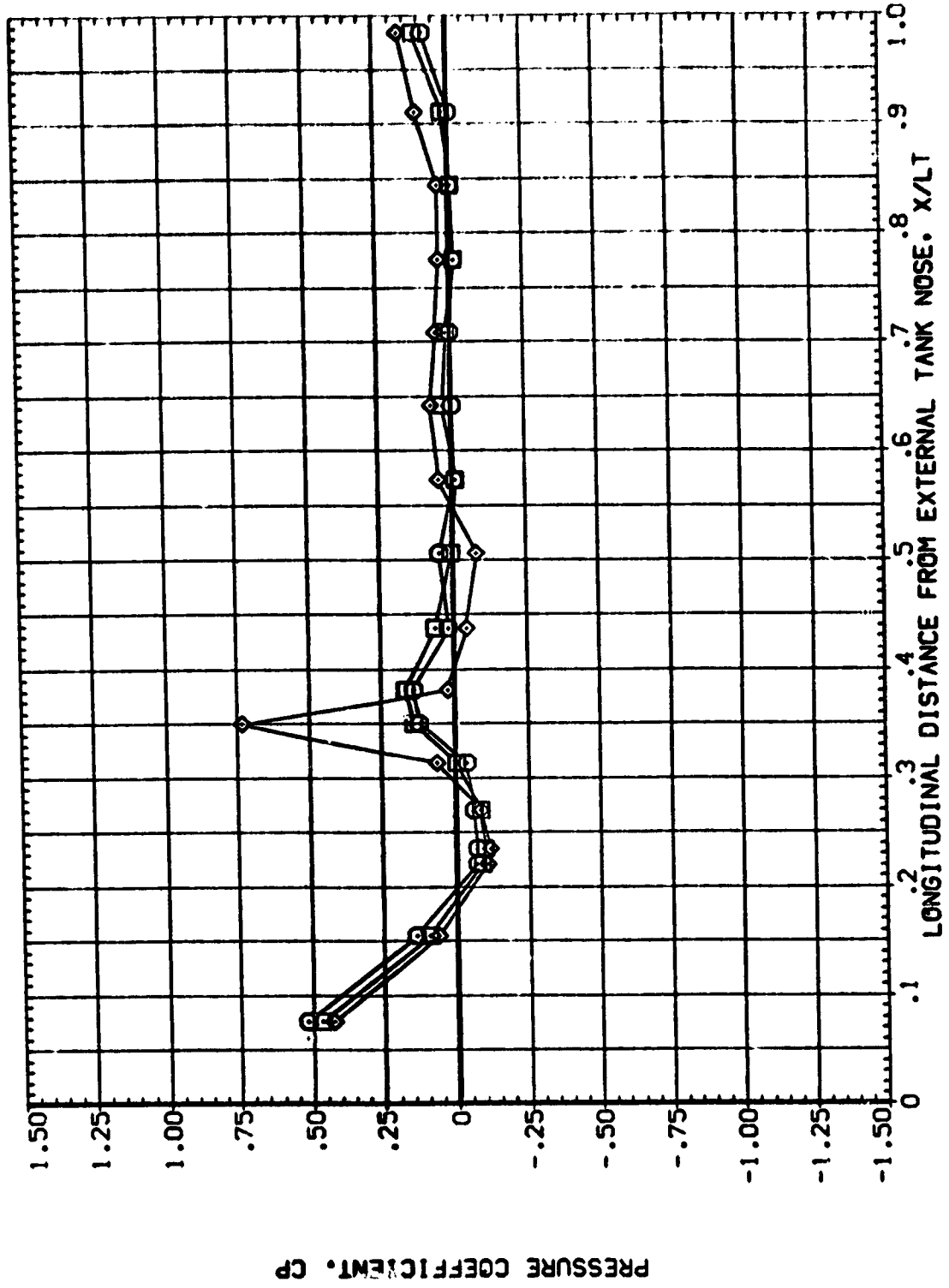


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

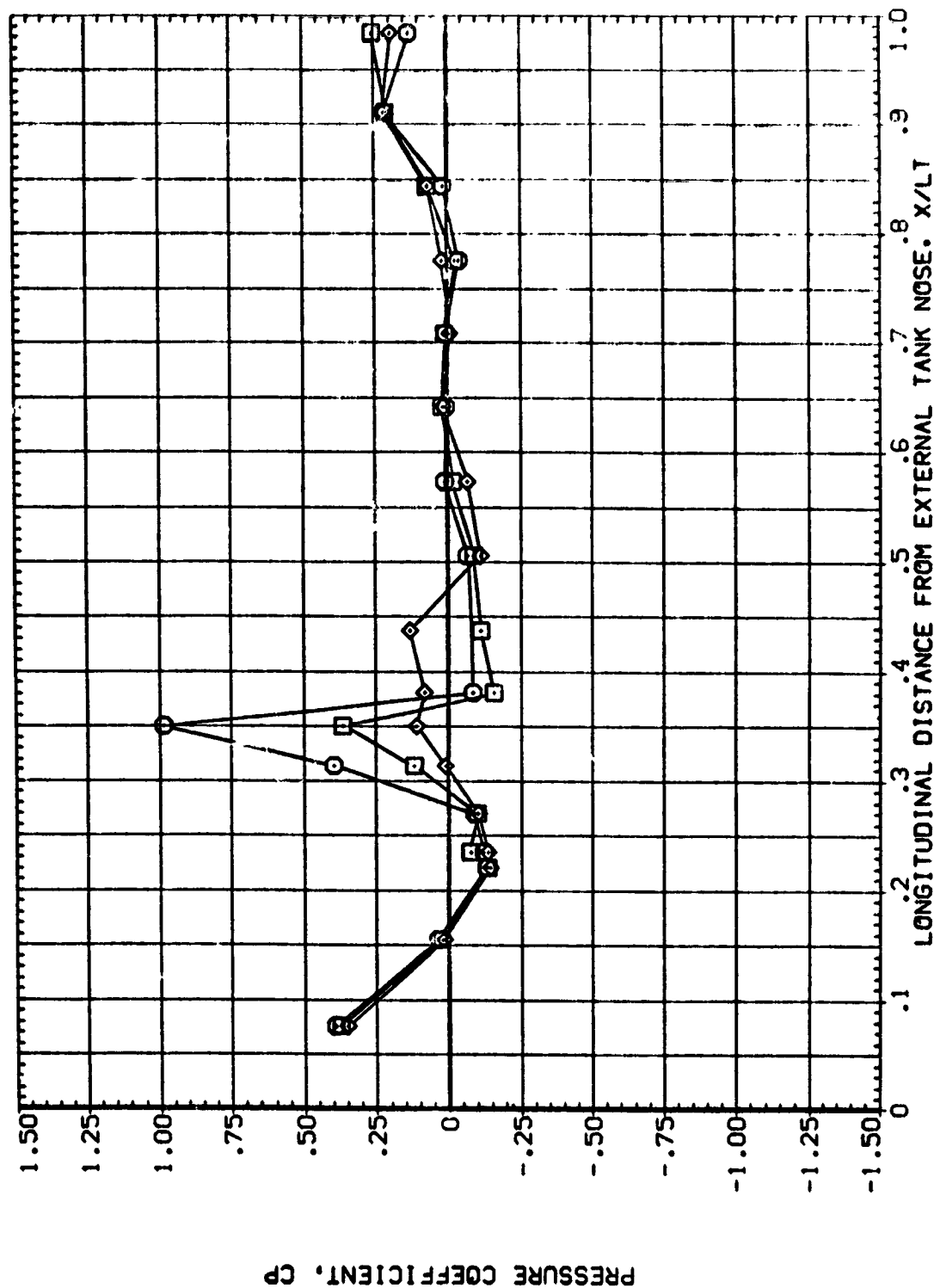
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				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	CONF16	90.000
○	216.000	-4.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	5.000	.000
□	234.000							IN.	X-SRB	.140	.000
◇	252.000							IN.		.000	.500
								IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	270.000	288.000	296.000	306.000	314.000	324.000	SREF	LREF	BREF	XREF
○	270.000	288.000	296.000	306.000	314.000	324.000	6.198	5.313	5.313	2.549
□	270.000	288.000	296.000	306.000	314.000	324.000	5.313	5.313	5.313	2.549
◇	270.000	288.000	296.000	306.000	314.000	324.000	5.313	5.313	5.313	2.549



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 56 (IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ◇  
 □  
 ○

PHI  
 324.000  
 342.020  
 360.000

BETA  
 -4.000

MACH  
 1.960

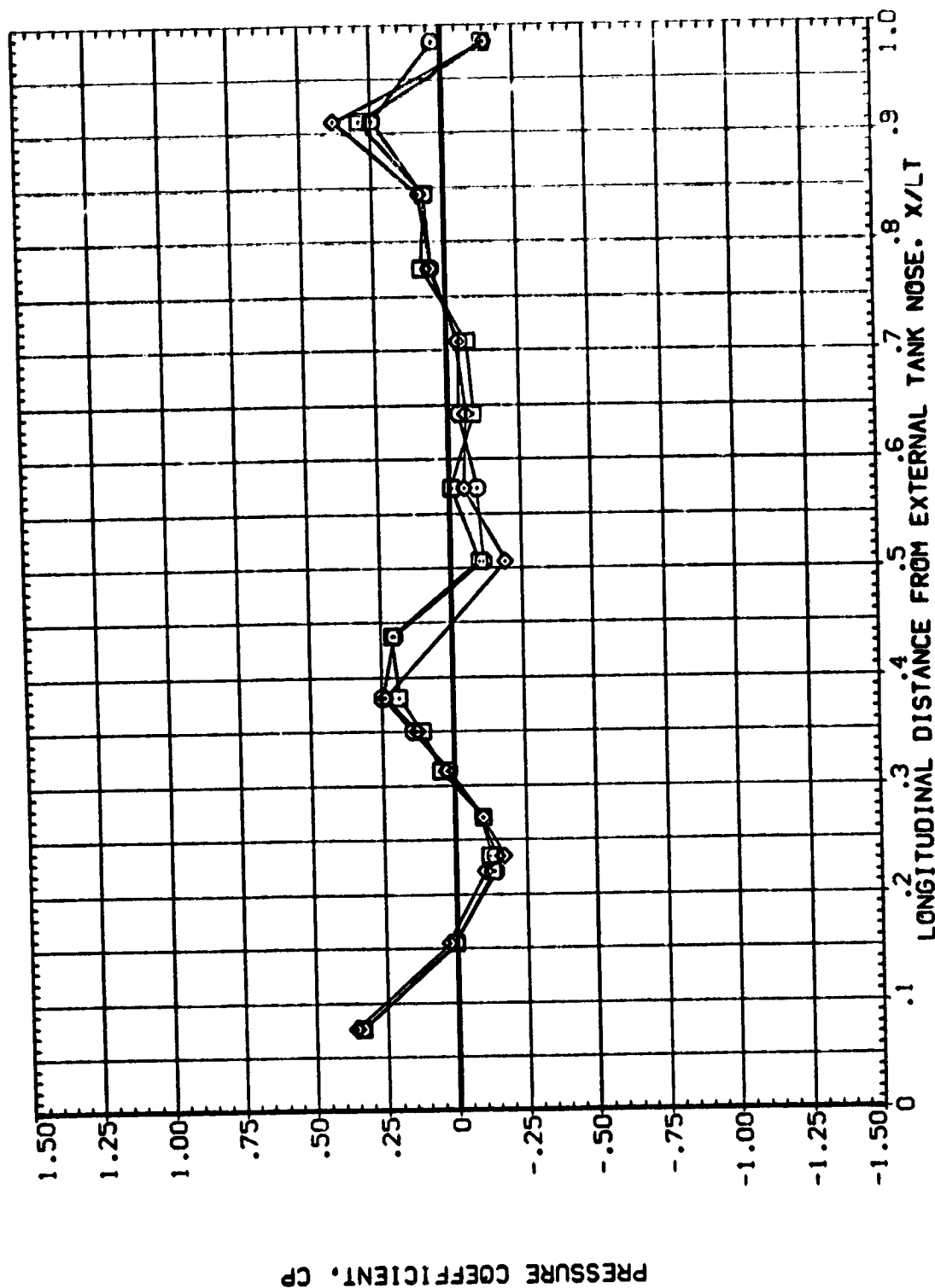
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 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

ALPHA  
 DELTAZ  
 X-SXB

PARAMETRIC VALUES  
 5.000  
 .140  
 .000

CONFIG  
 RUDDER  
 ORBINC

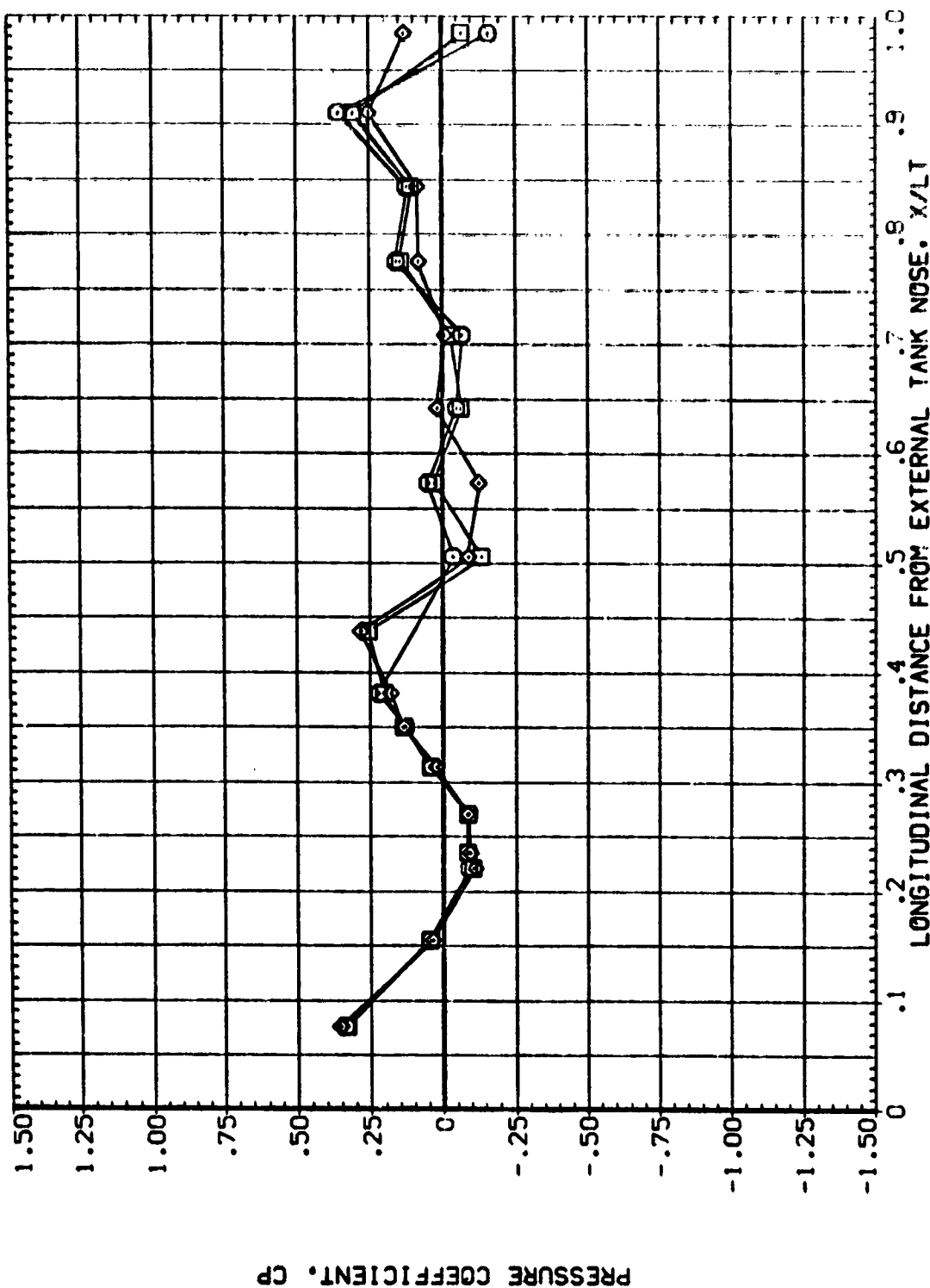
50.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

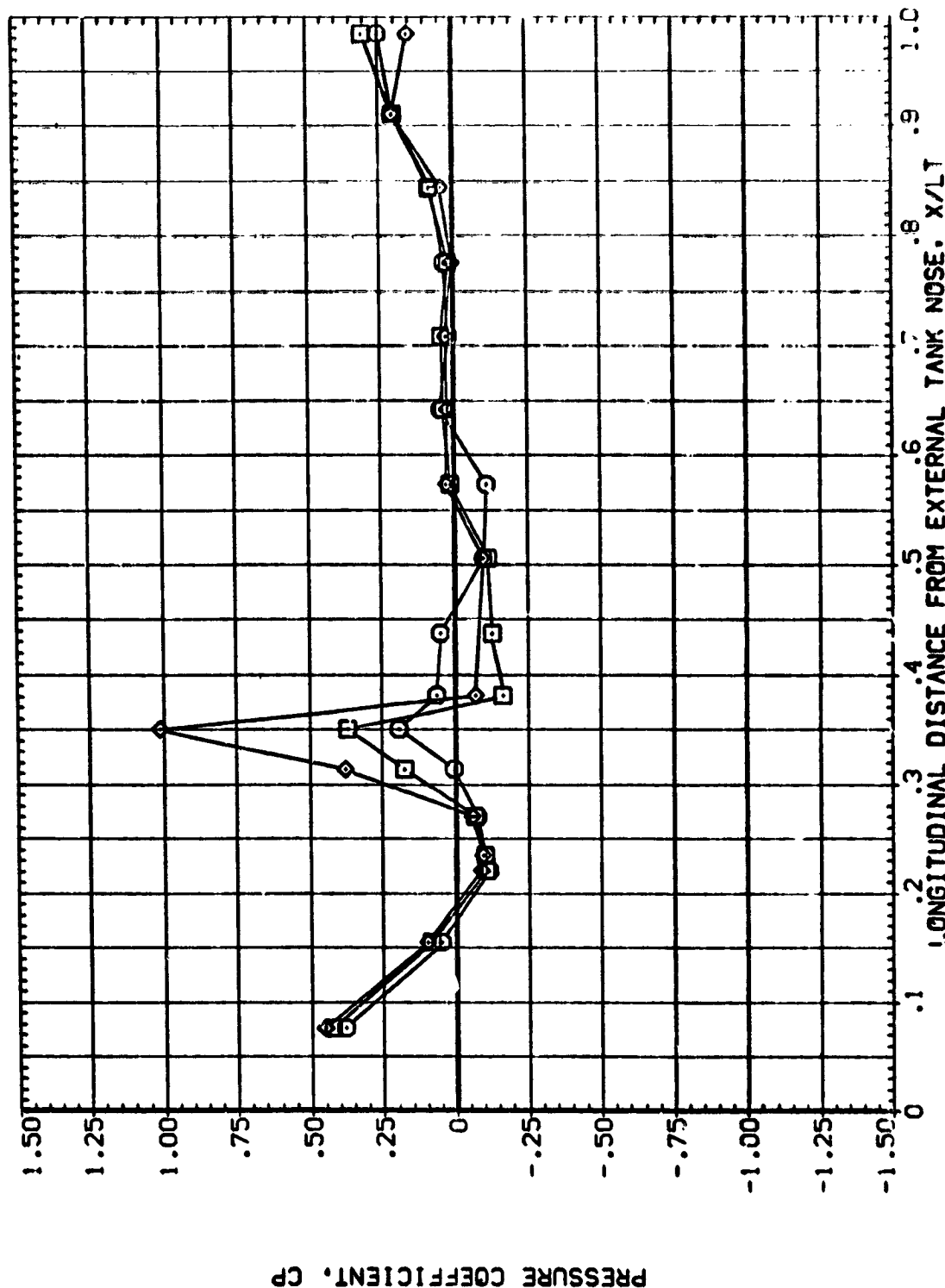
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SD. IN.	CONFIS	
□	.000	.000	1.960	5.313	IN.	.140	RUDER
◇	18.000			5.313	IN.	.000	DRBINE
	36.000			2.549	IN.	.500	
				.000	IN.		
				ZMRP			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

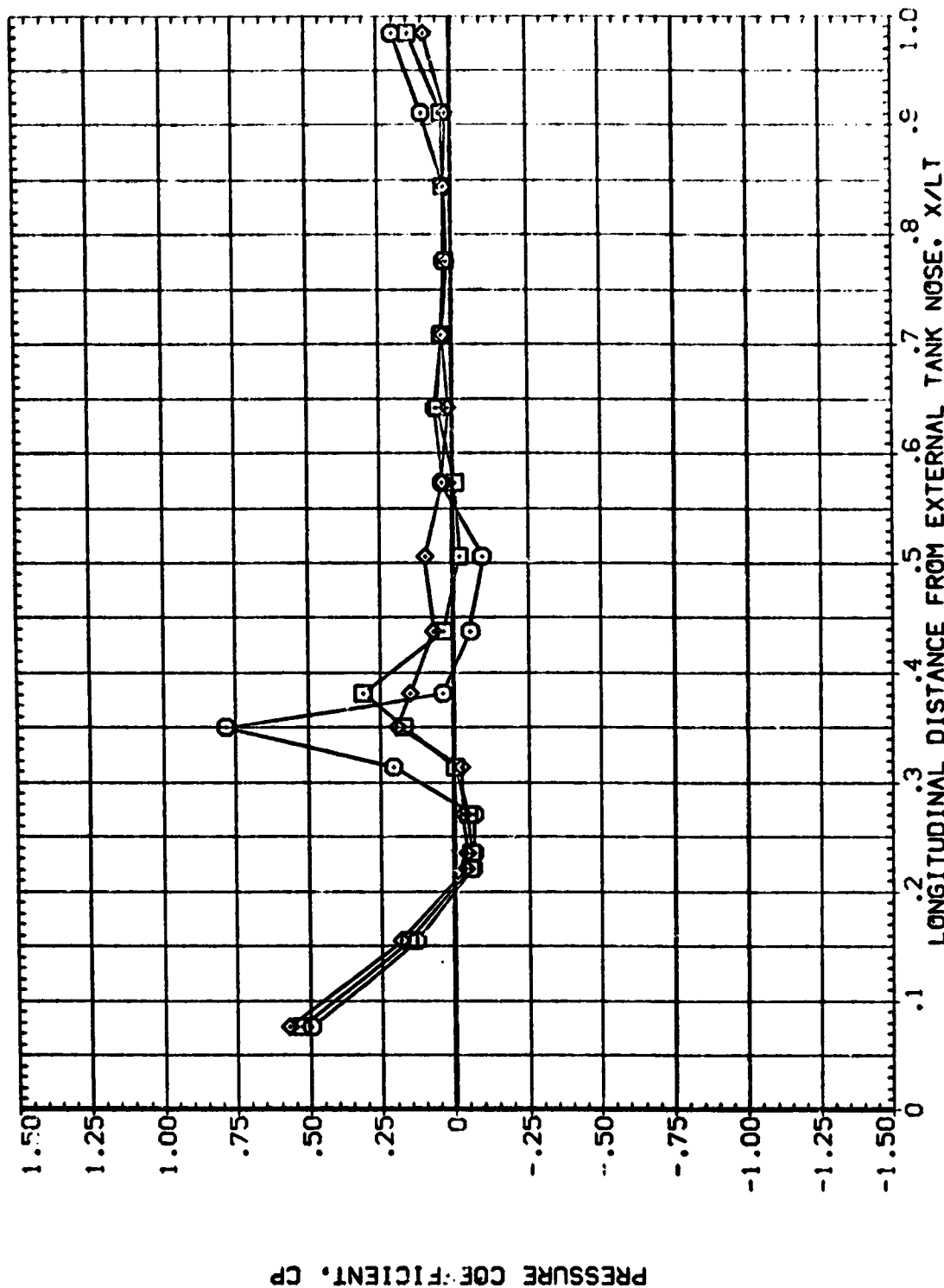
SYMBOL	PAI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	SD. IN.	ALPHA	CONF 15	CONF 16
○	54.000	.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	72.000							IN.	X-S98	.000	.000
◇	90.000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000			SREF	LREF	BREF	YPRP	50. IN.	5.000	CONF IG	90.000
○			.000	1.960	6.198	5.313	5.313	2.549	IN.	.140	RUDDER	.000
□									IN.	.000	ORBIT INC	.500
◇	144.000								IN.			
									IN.			
									IN.			

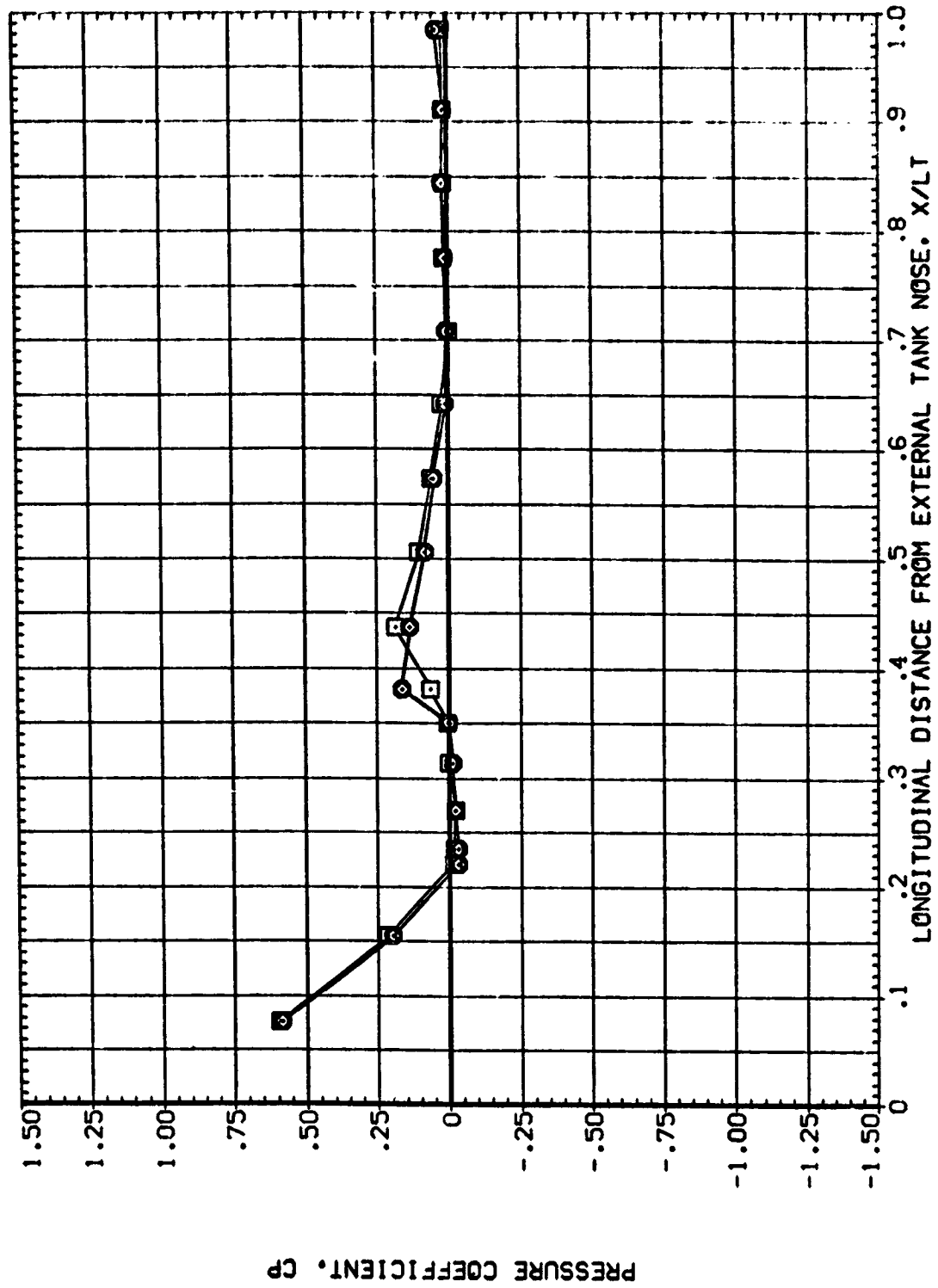


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

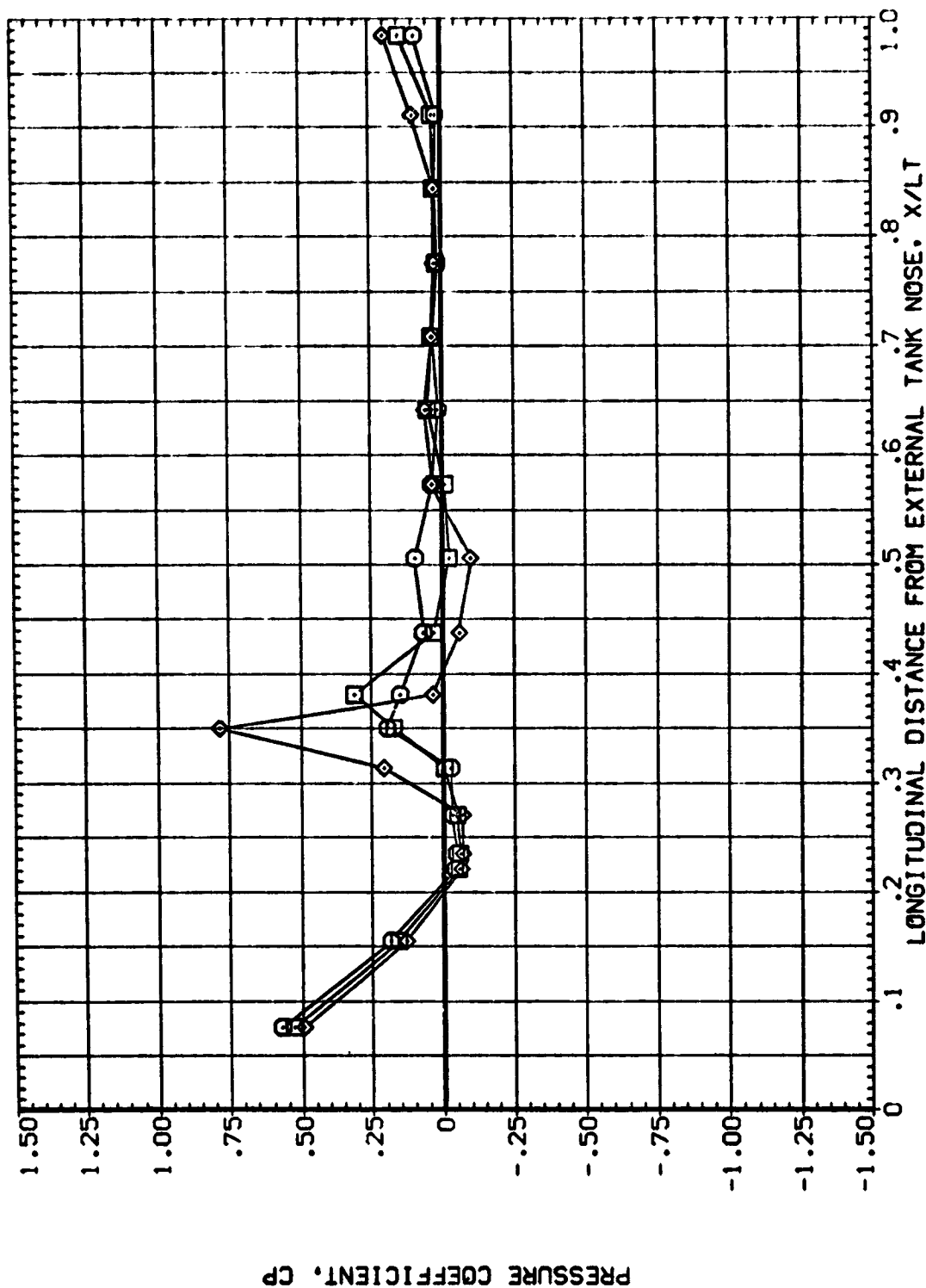
SYMBOL	PHI	BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES						
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	SO. IN.	IN.	ALPHA	CONF IS	RUDDER	DRB INC	
□	182.000	.000	1.960	6.198	5.313	5.313	2.549	.000	.000	IN.	IN.	DELTA Z	5.000	.140	.000	.500
◇	198.000									IN.	IN.	X-SRB	.000	.000		
										IN.	IN.					
										IN.	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	LREF	BREF	50. IN.	ALPHA	CONF IG
□	216.000	.000	1.960	6.198	5.313	5.313	IN.	DELTA Z	5.000
◇	234.000			2.549	2.549	2.549	IN.	X-SRB	.140
◇	252.000			.000	.000	.000	IN.		.000
				ZRRP	ZRRP	ZRRP			.500

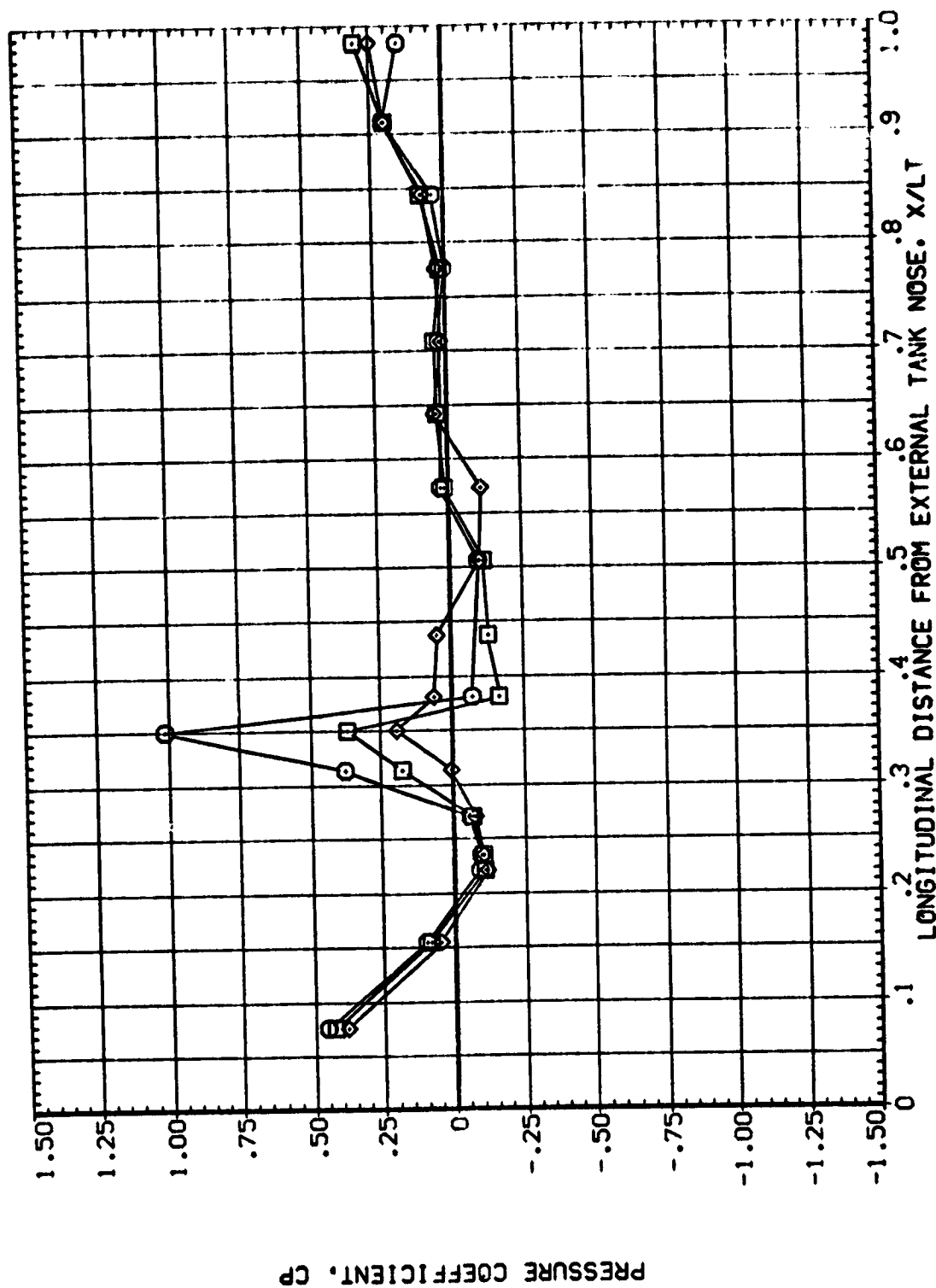


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

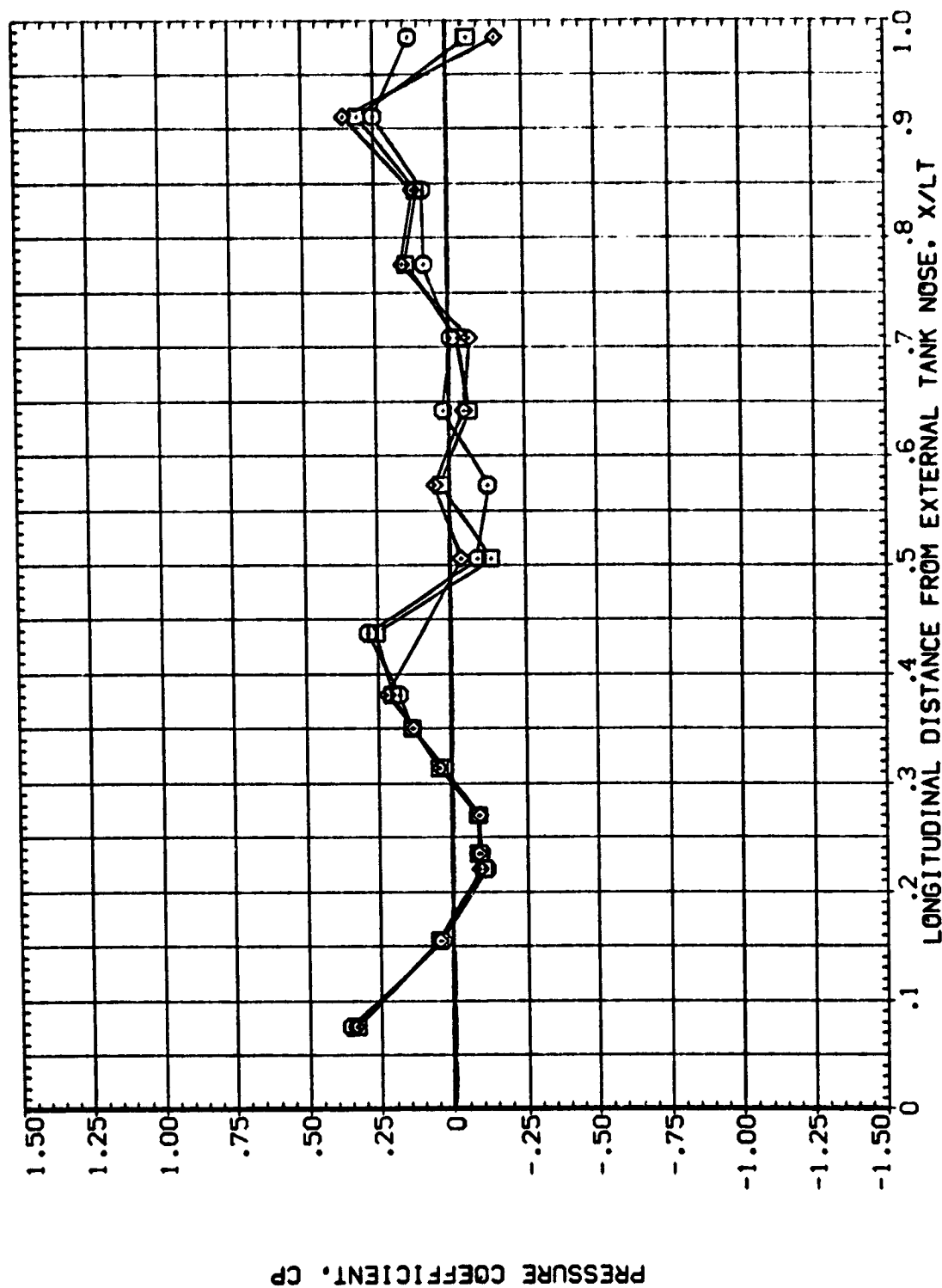
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	ALPHA	CONFIG		
◇	270.000	.000	1.960	5.198	DELTA Z	5.000	RUDDER	90.000
□	288.000			5.313	X-SRB	.140	ORBIT	.000
	306.000			2.549		.000		.500
				ZMRP				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONFIS	RUDDER	ORBITAL
◇	324.000	.000	1.960	6.198	5.313	5.313	2.549	DELTA Z	5.000	.140	.000
□	342.000			XRRP	YRRP	ZRRP		X-SRB	.000	.000	.500
◇	360.000										

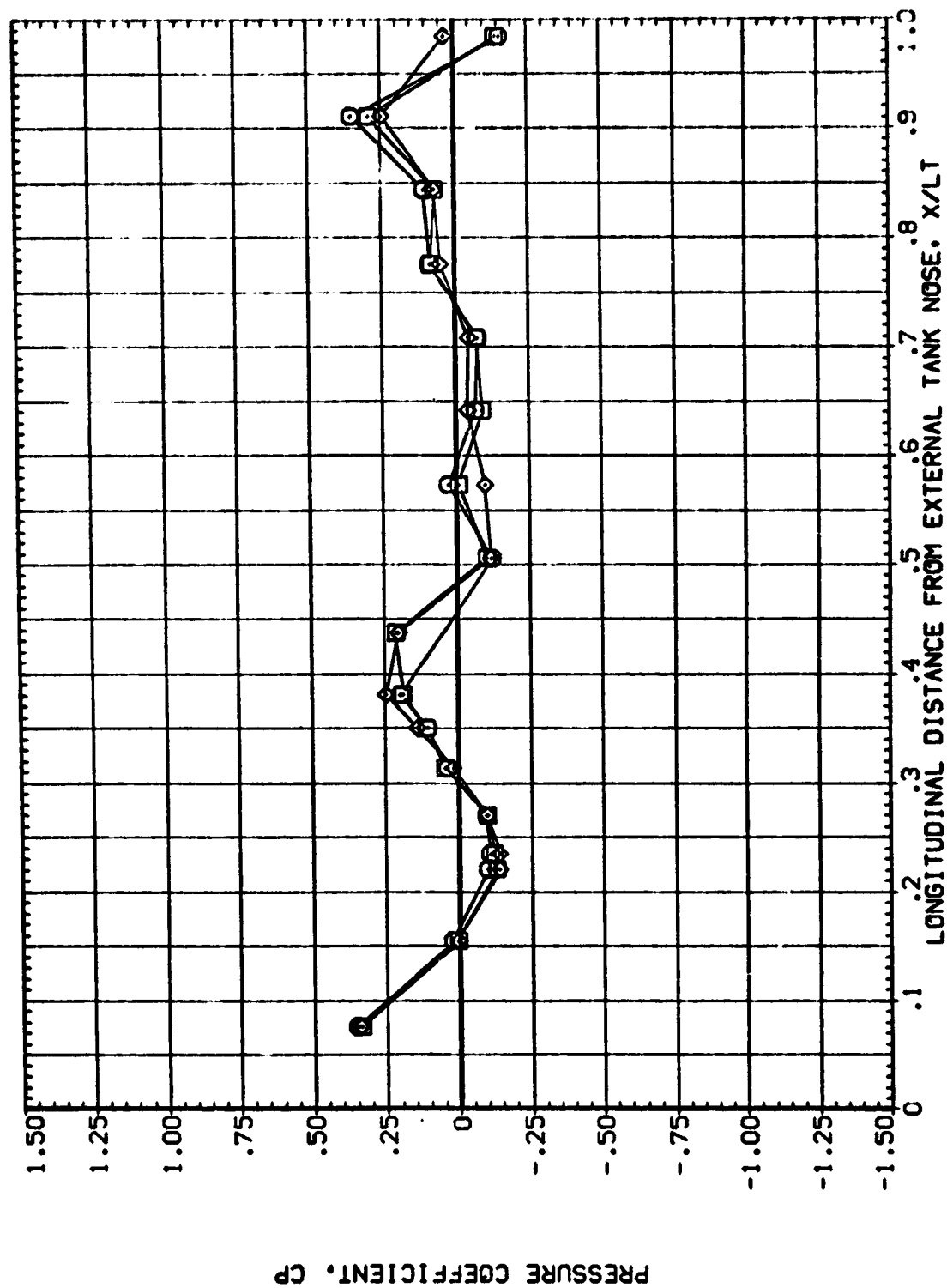


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

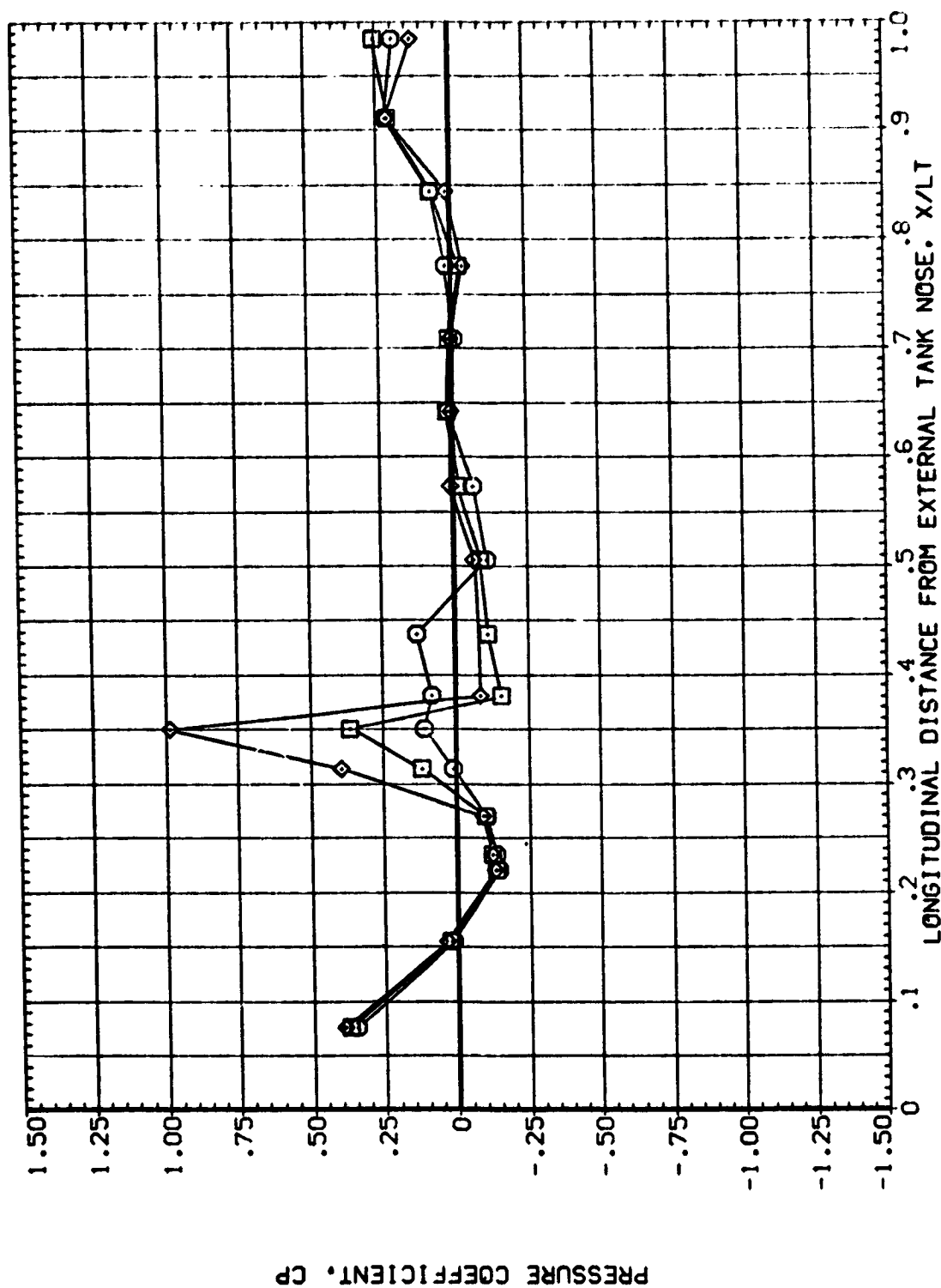
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	VMRP	ALPHA	CONF IG	RUDDER	ORBITAL
□	.000	4.000	1.560	6.198	5.313	5.313	2.549	DELTA Z	.140	.000	.000
◇	18.000							X-SRB	.000	.000	.500
◇	36.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

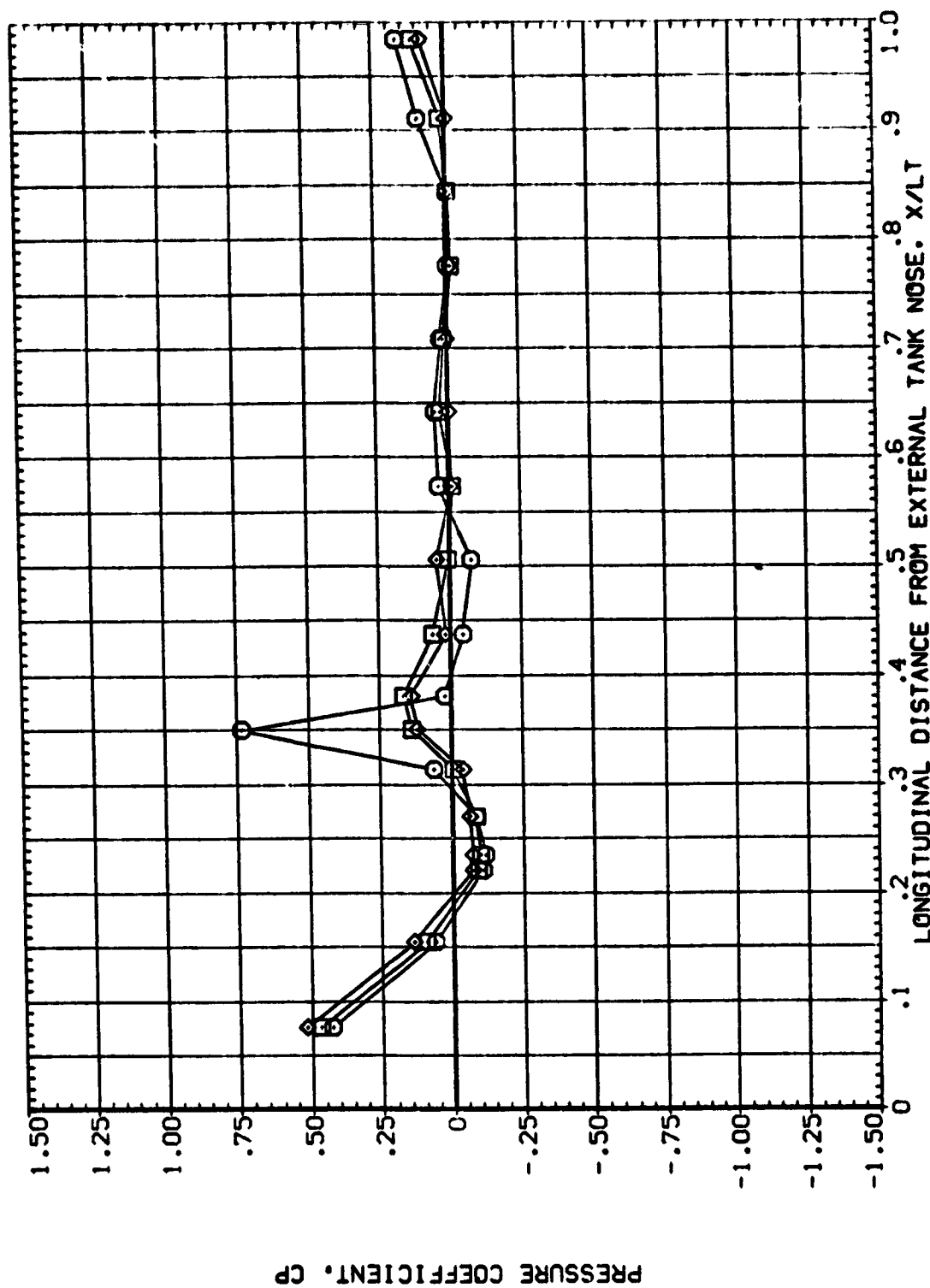
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	50. IN.	ALPHA	CONFIG	90.000
○	54.000	4.000	1.960	6.198	5.313	5.313	.000	IN.	DELTA Z	5.000	.000
□	72.000			2.549	2.549	2.549	.000	IN.	X	.140	.000
◇	90.000			.000	.000	.000	.000	IN.	ORIGIN	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

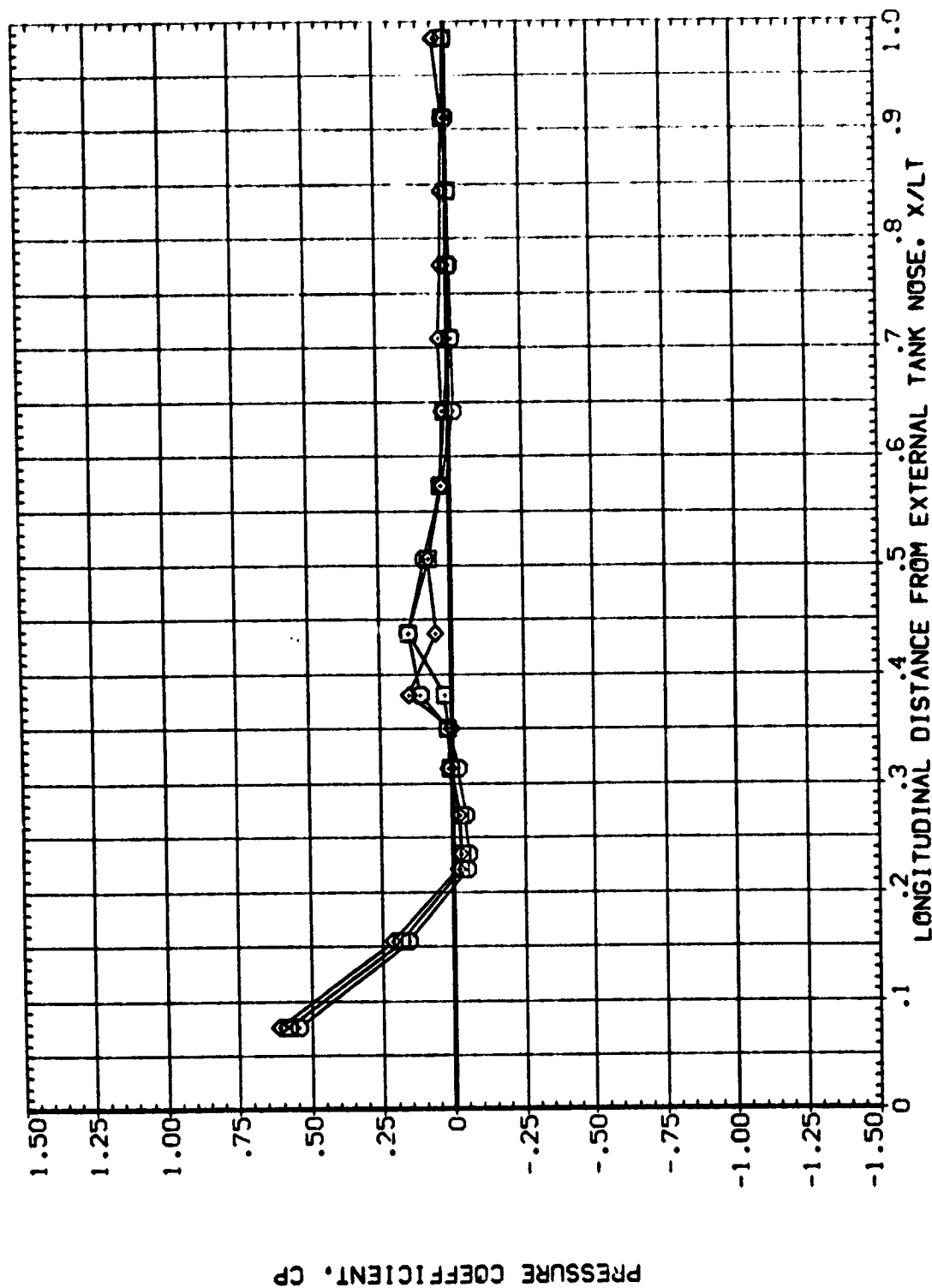
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SG. IN.	DELTA Z	CONF IS	CL
○	108.000	4.000	1.960	6.198	5.313	5.313	2.549	IN.	X-SRB	.000	.000
□	126.000							IN.		.140	.000
◇	144.000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	162.000	180.000	4.000	1.960	SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF IG	90.000
□					6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
◇	198.000								IN.	X-SRB	DRB INC	.500
									IN.			

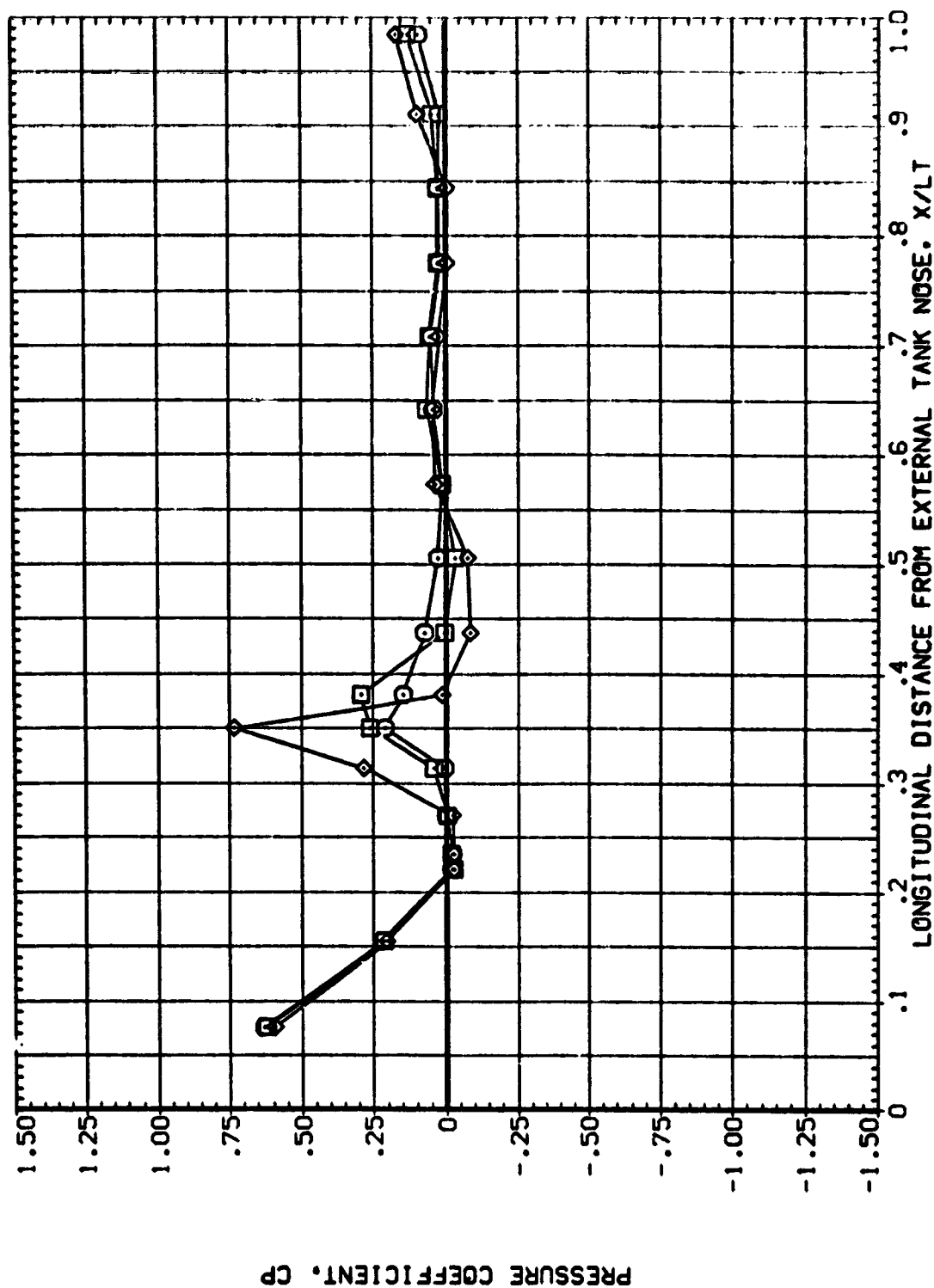


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	216.000	234.000			SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF IG	50.000
○			4.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
□									IN.	X-508	ORIGIN	.500
◇	252.000								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82103)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 270.000  
 288.000  
 306.000

BETA  
 4.000

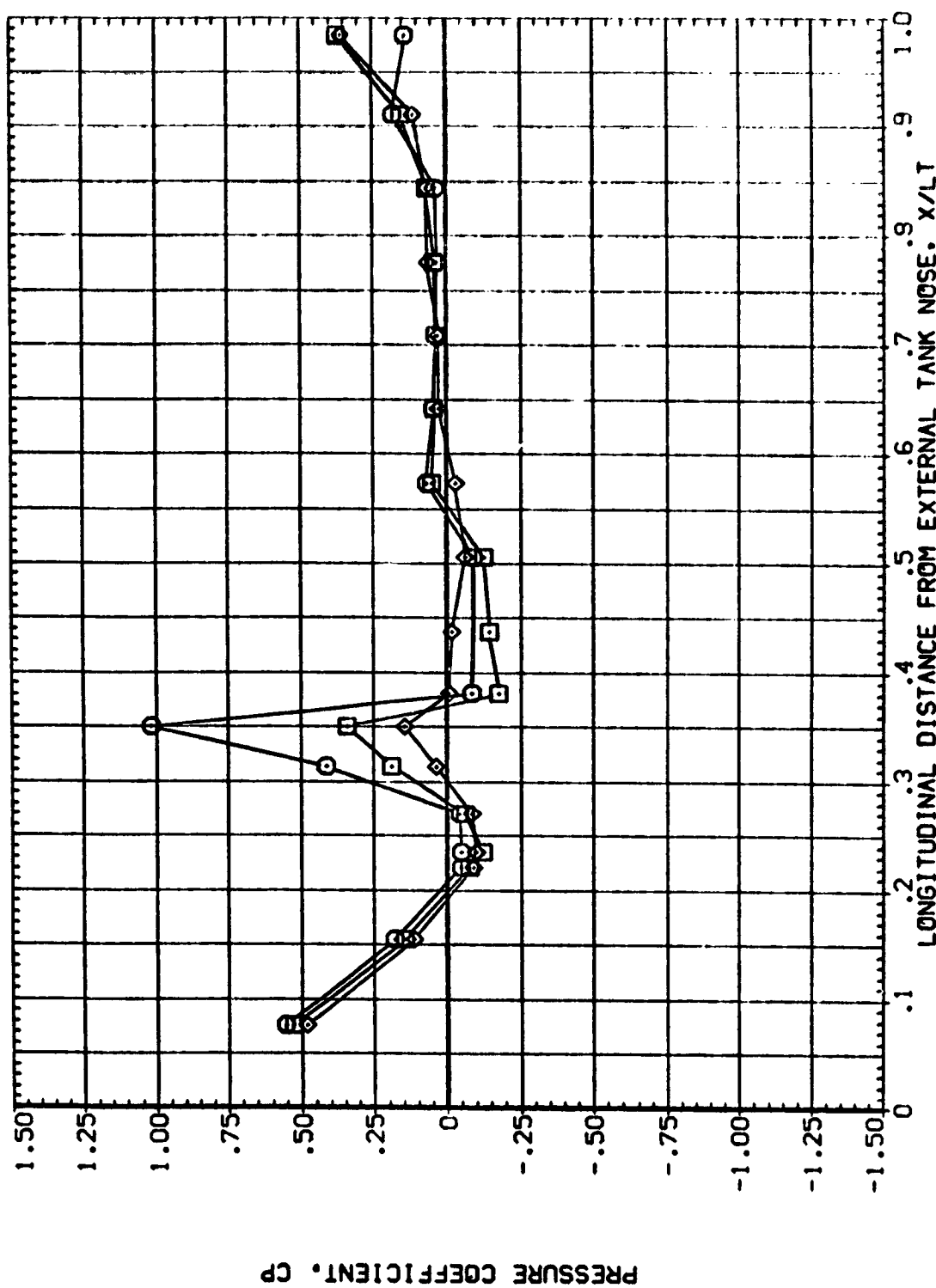
MACH  
 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 5.000  
 .140  
 .000

CONFIG  
 RUDDER  
 ORBITAL

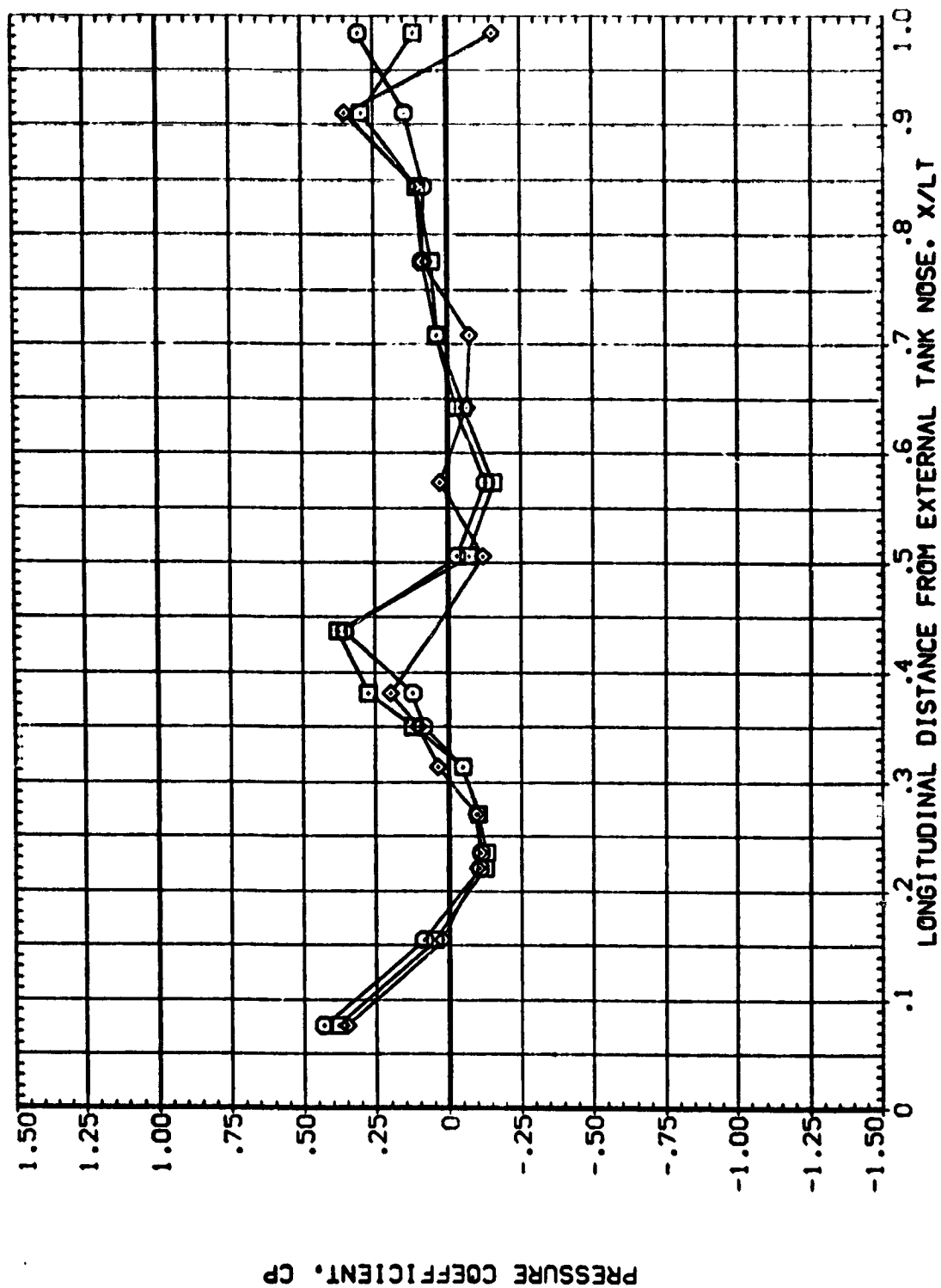


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LINEF	5.313	6.198	ALPHA	CONFIS	90.000	
○	324.000	4.000	1.960	BREF	2.549	5.313	5.313	DELTAZ	RUDDER	.000	
□	342.000			XREF	.000	.000	.000	X-SRB	DBINC	.000	.500
◇	360.000			YREF	.000	.000	.000				
				ZREF	.000	.000	.000				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03  
EXTERNAL TANK (A82T03)

**SYMBOL**

**PHI**  
**.000**  
**18.000**  
**36.000**

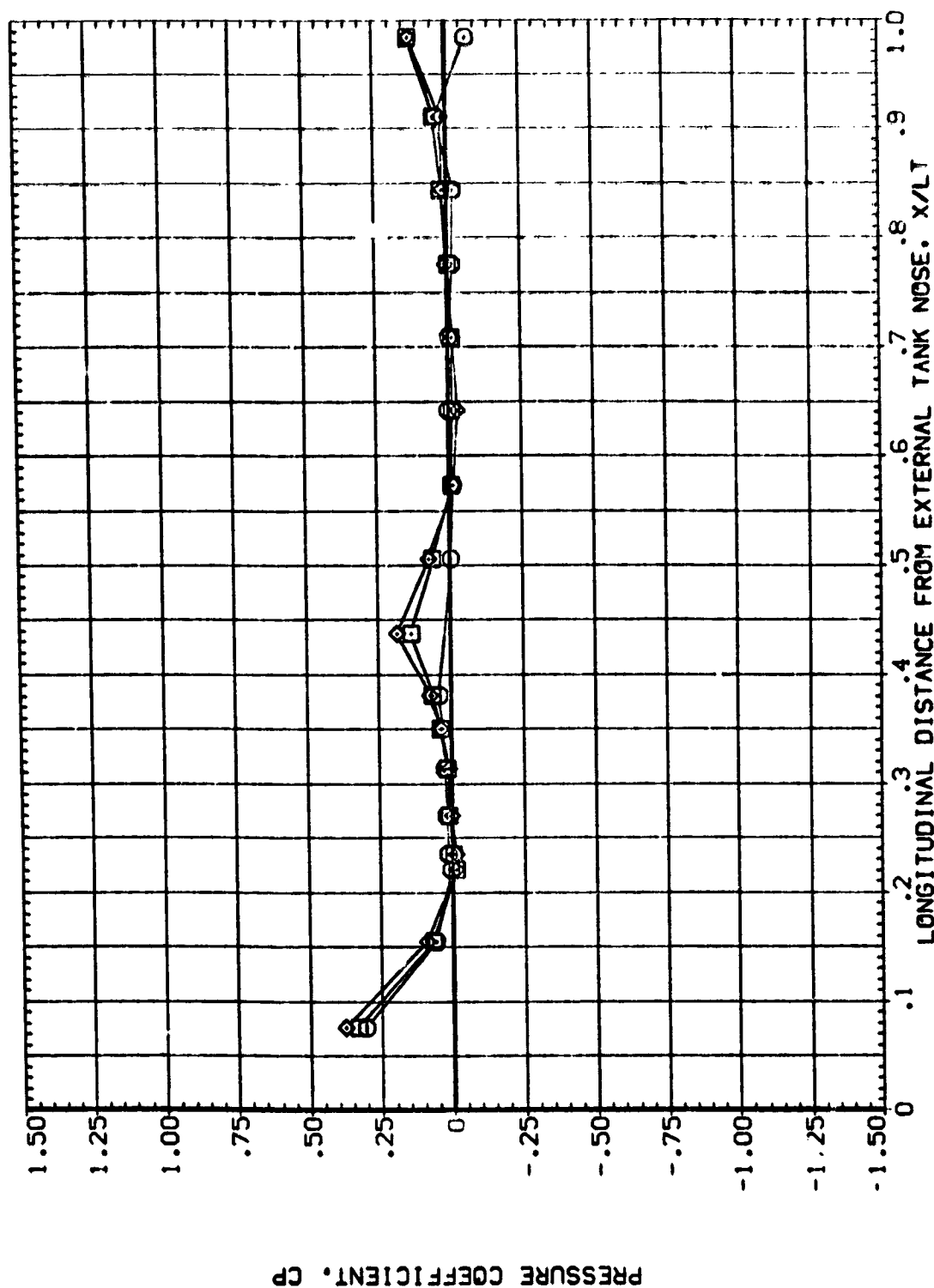
BETA	MACH
-4.000	3.480

**MACH**  
**3.480**

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

PARAMETRIC VALUES	CONFID	CONFID
ALPHA	5.000	CONFID
DELTA Z	.140	CONFID
X-SRB	.000	CONFID

000' 000' 500'



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
○  
□  
◇

PHI  
54.000  
72.000  
90.000

BETA  
-4.000

MACH  
3.480

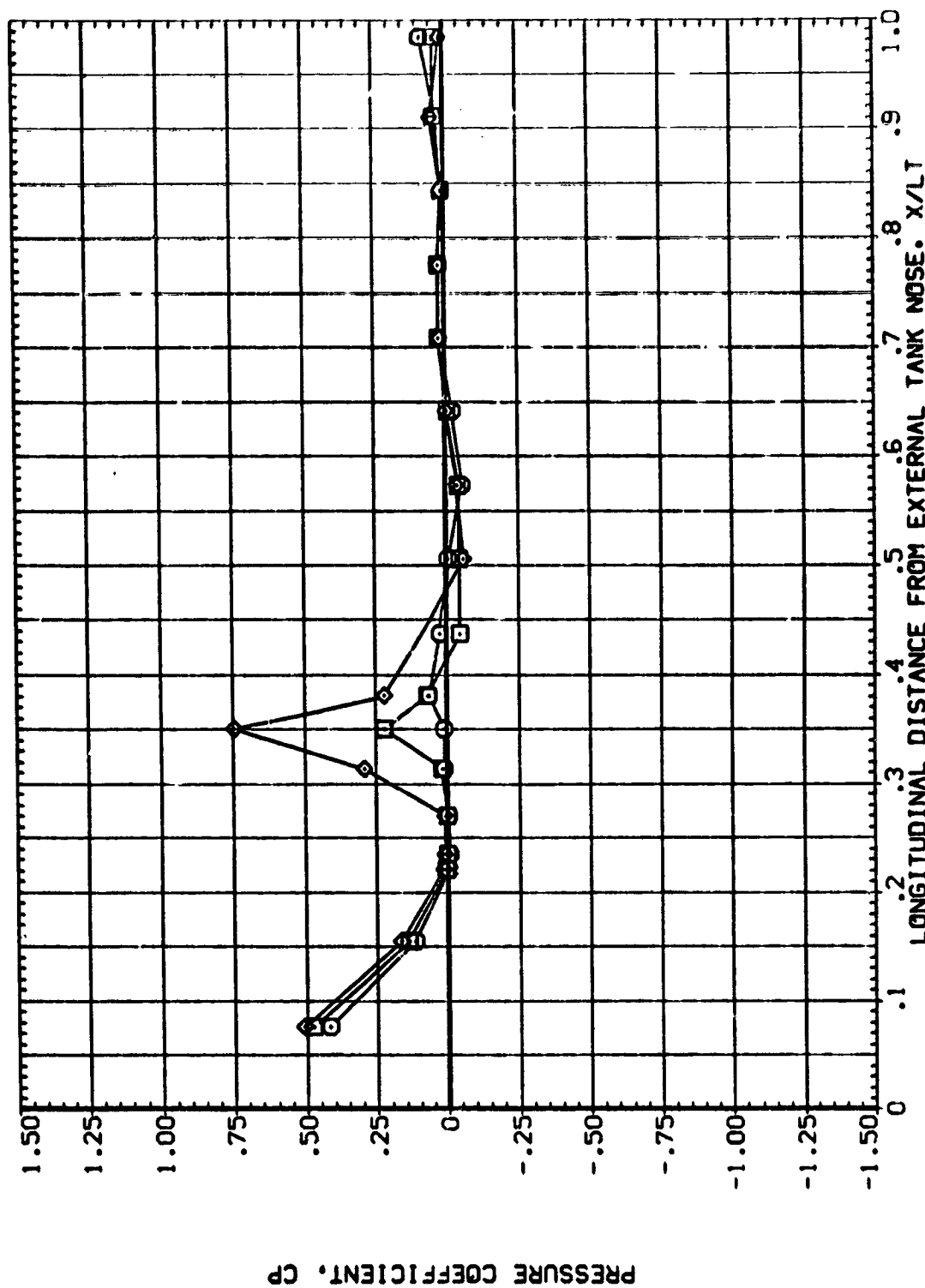
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LREF 5.313  
BREF 5.313  
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YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DETAZ  
X-SRB

PARAMETRIC VALUES  
5.000 CONF15  
.140 RUDDER  
.000 DRBINC

50.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 108.000  
 126.000  
 144.000

BETA  
 -4.000

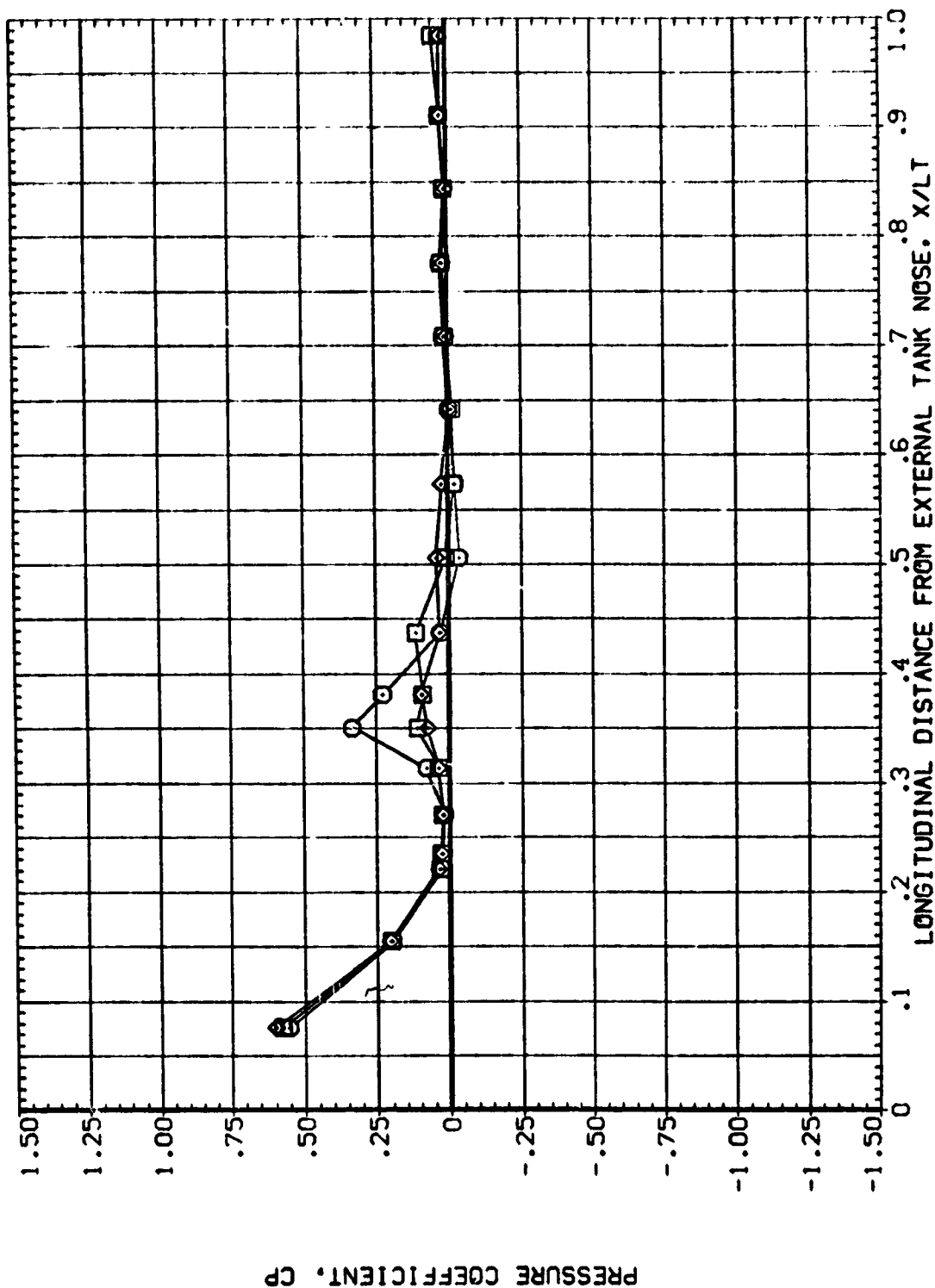
MACH  
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REFERENCE DATA  
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 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

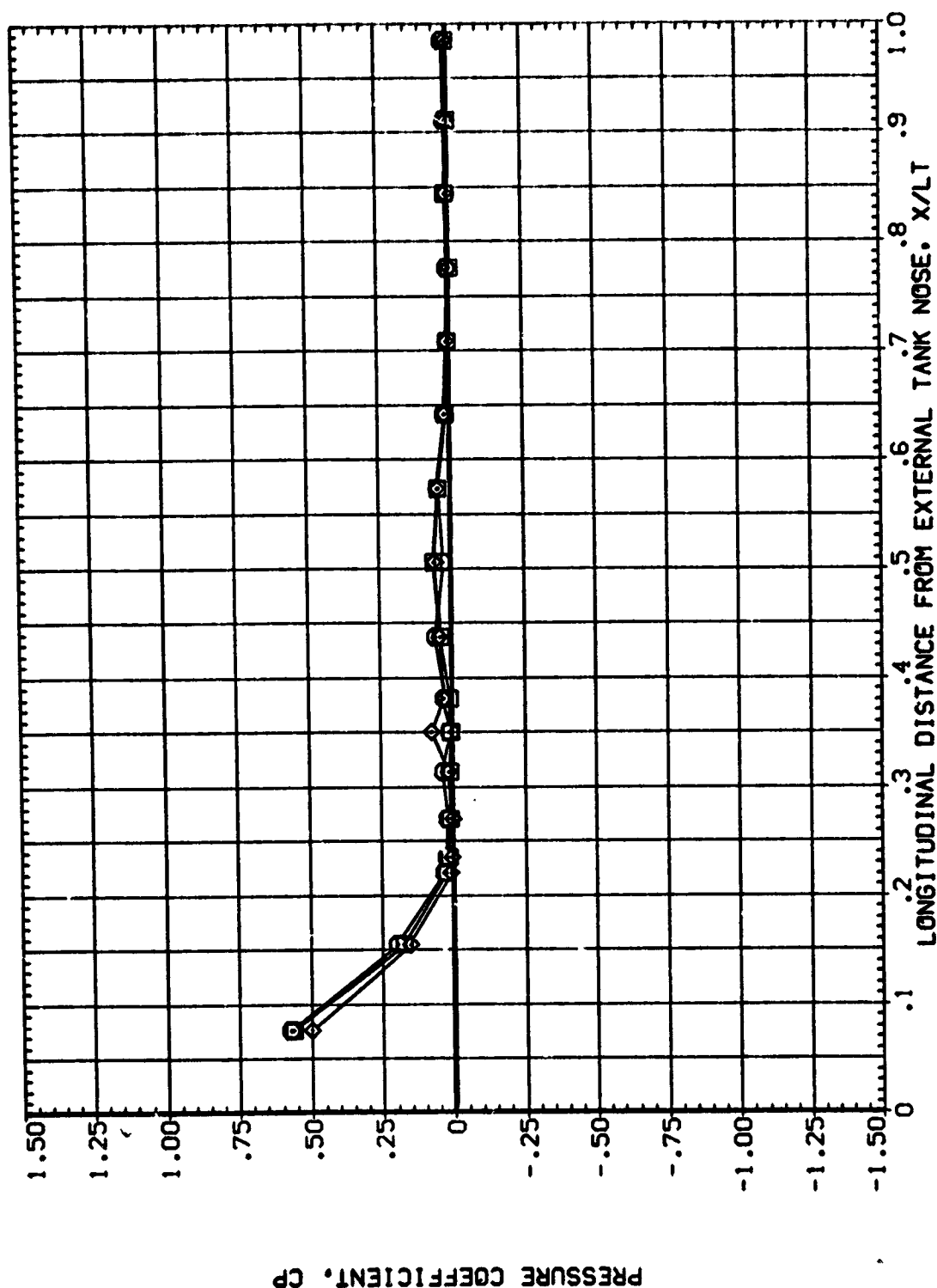
PARAMETRIC VALUES  
 5.000  
 .140  
 .030  
 50.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

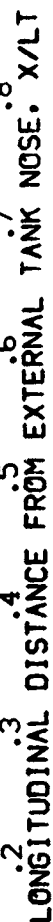
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	162.000	180.000			SREF	LREF	BREF	XPRP	YPRP	ZPRP	ALPHA	DELTA Z
○	162.000	180.000	-4.000	3.480	6.198	5.313	5.313	2.549	.000	.000	5.000	.140
□	162.000	180.000	-4.000	3.480	6.198	5.313	5.313	2.549	.000	.000	5.000	.140
◇	162.000	180.000	-4.000	3.480	6.198	5.313	5.313	2.549	.000	.000	5.000	.140



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

EXTERNAL TANK (A82T03)

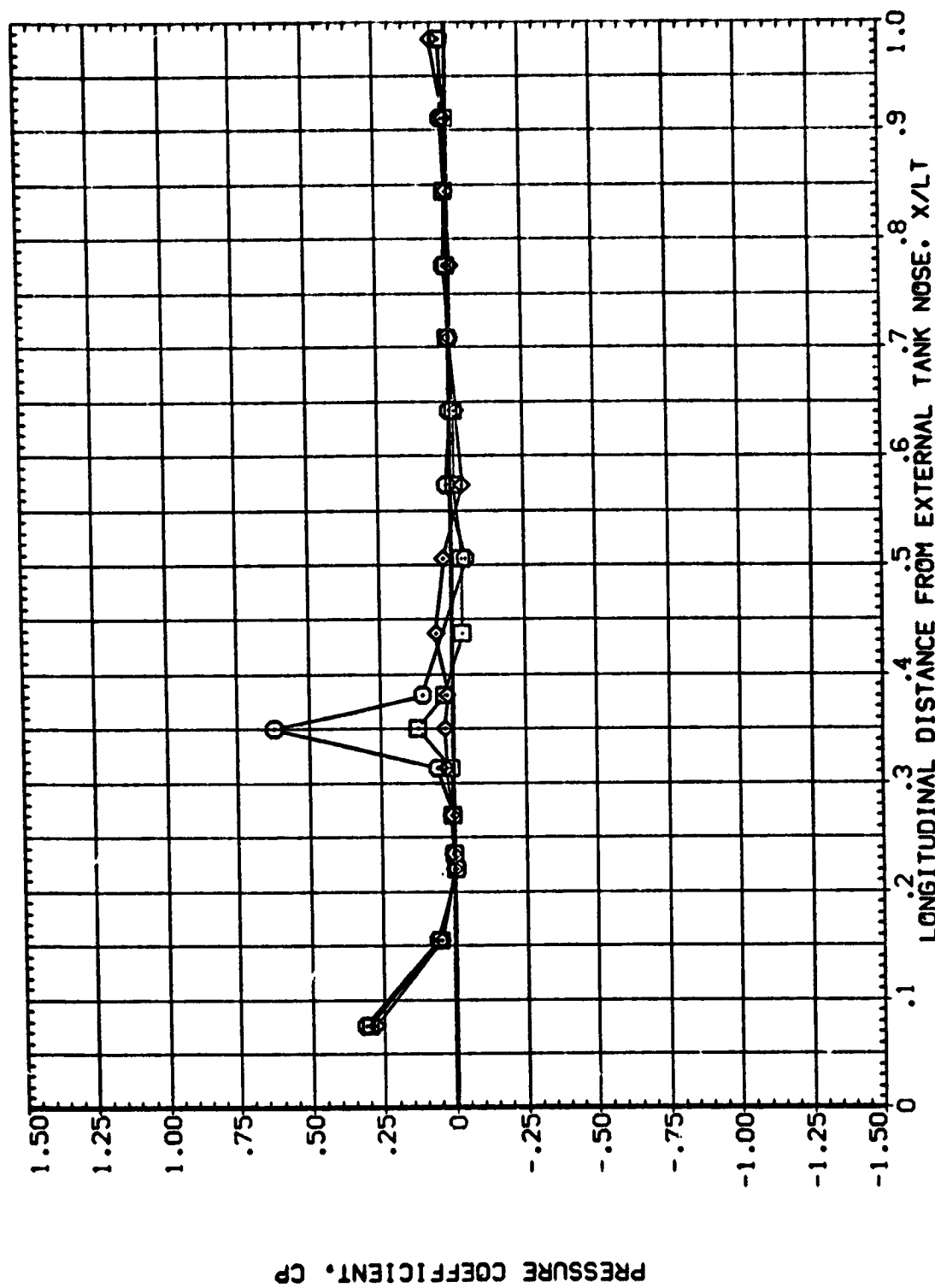
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MSFC 567(1A32F) T9 S3/2 03 EXTERNAL TANK (A82T03)

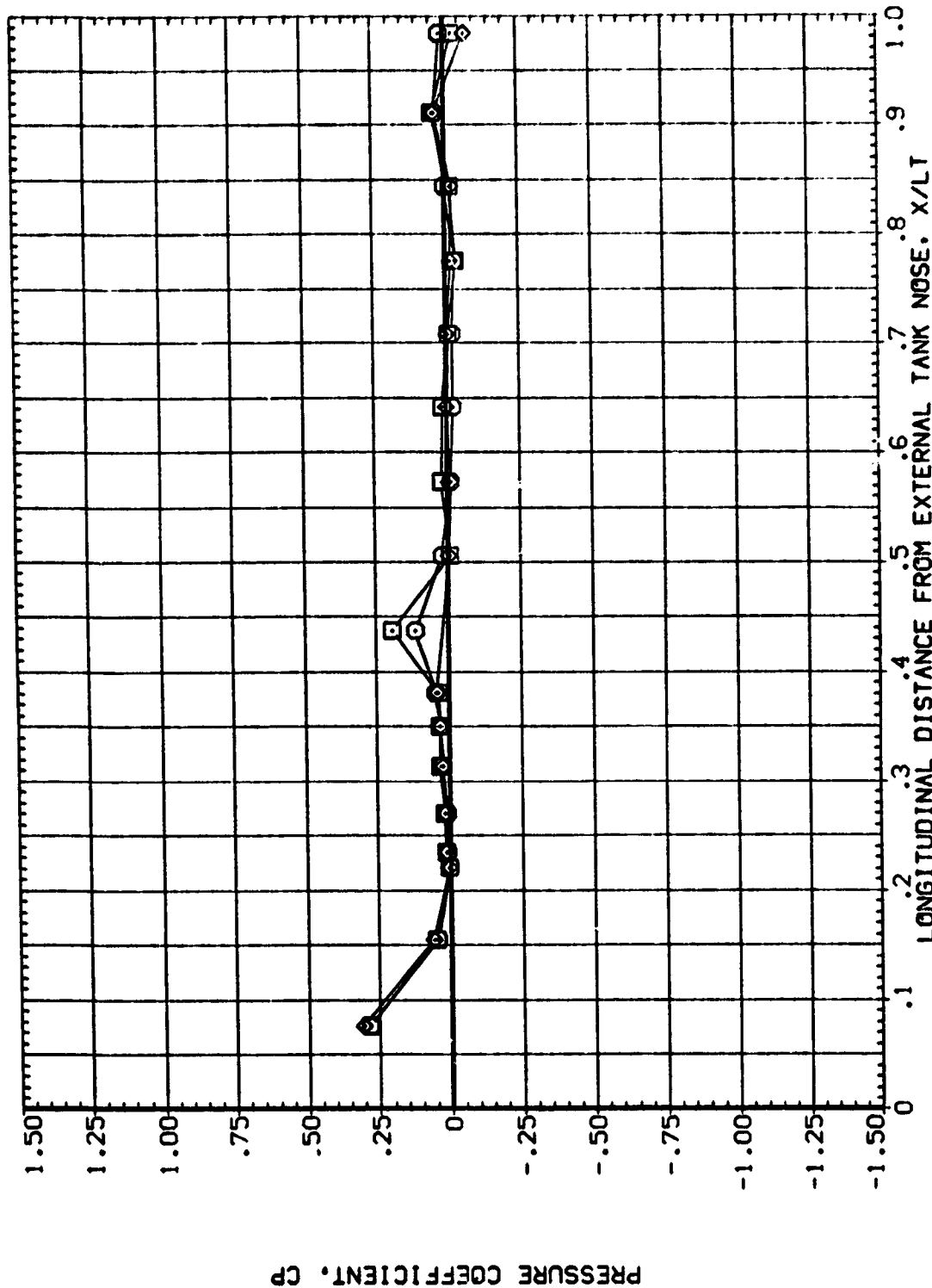
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	IN.	ALPHA	CONFIG
○	270.000	-4.000	3.480	6.198	5.313	5.313	2.549	IN.	IN.	DELTA Z	RUDDER
□	288.000							IN.	IN.	X-S98	ORBINC
◇	306.000							IN.	IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YPRP	SD, IN.	ALPHA	CONFIG	90,000
□	324,000	-4,000	3,480	5.198	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
◇	342,000							IN.	X-SRB	.000	.500
	360,000							IN.		ORB:NC	
								IN.			
								IN.			
								IN.			

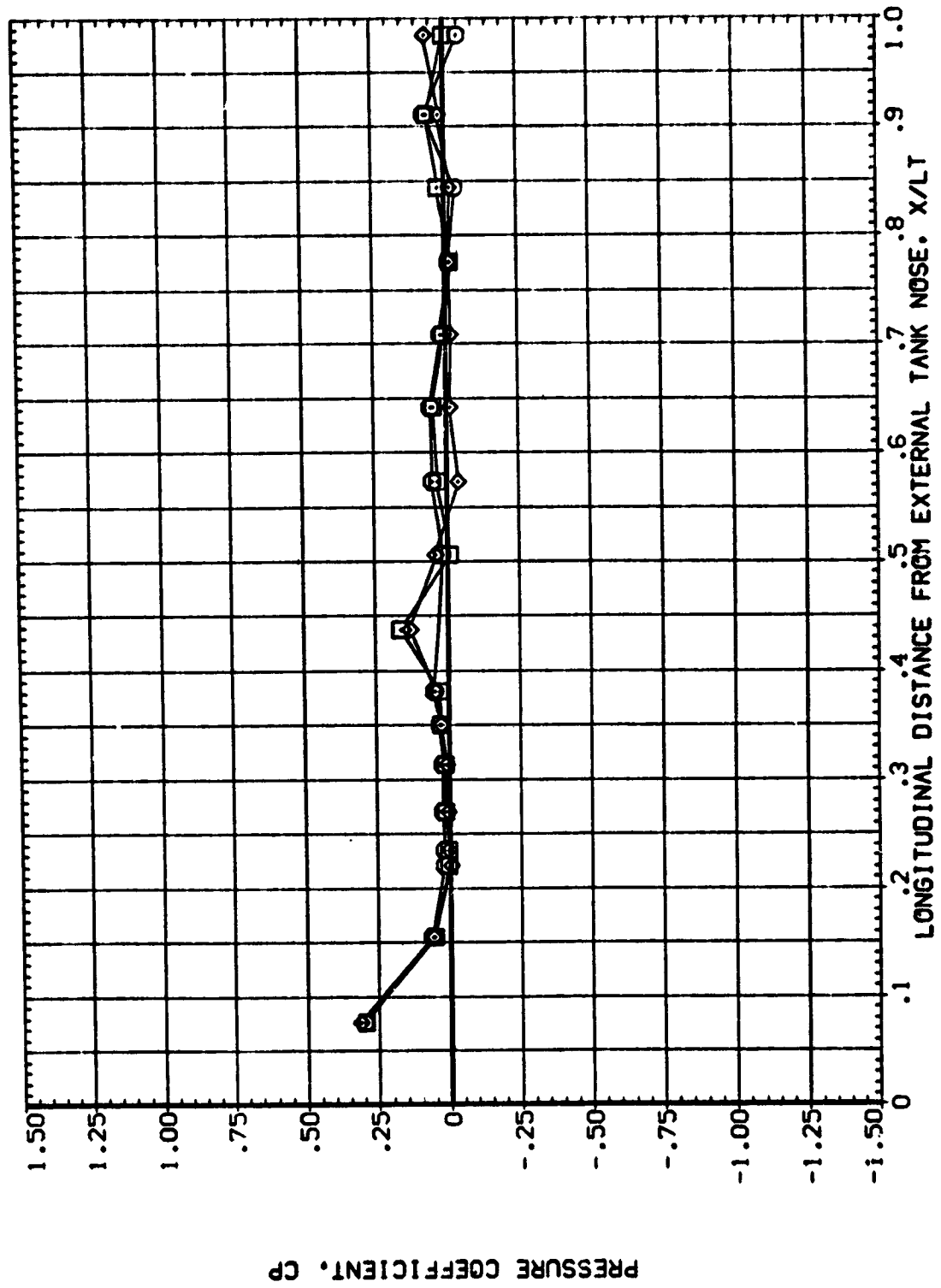


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

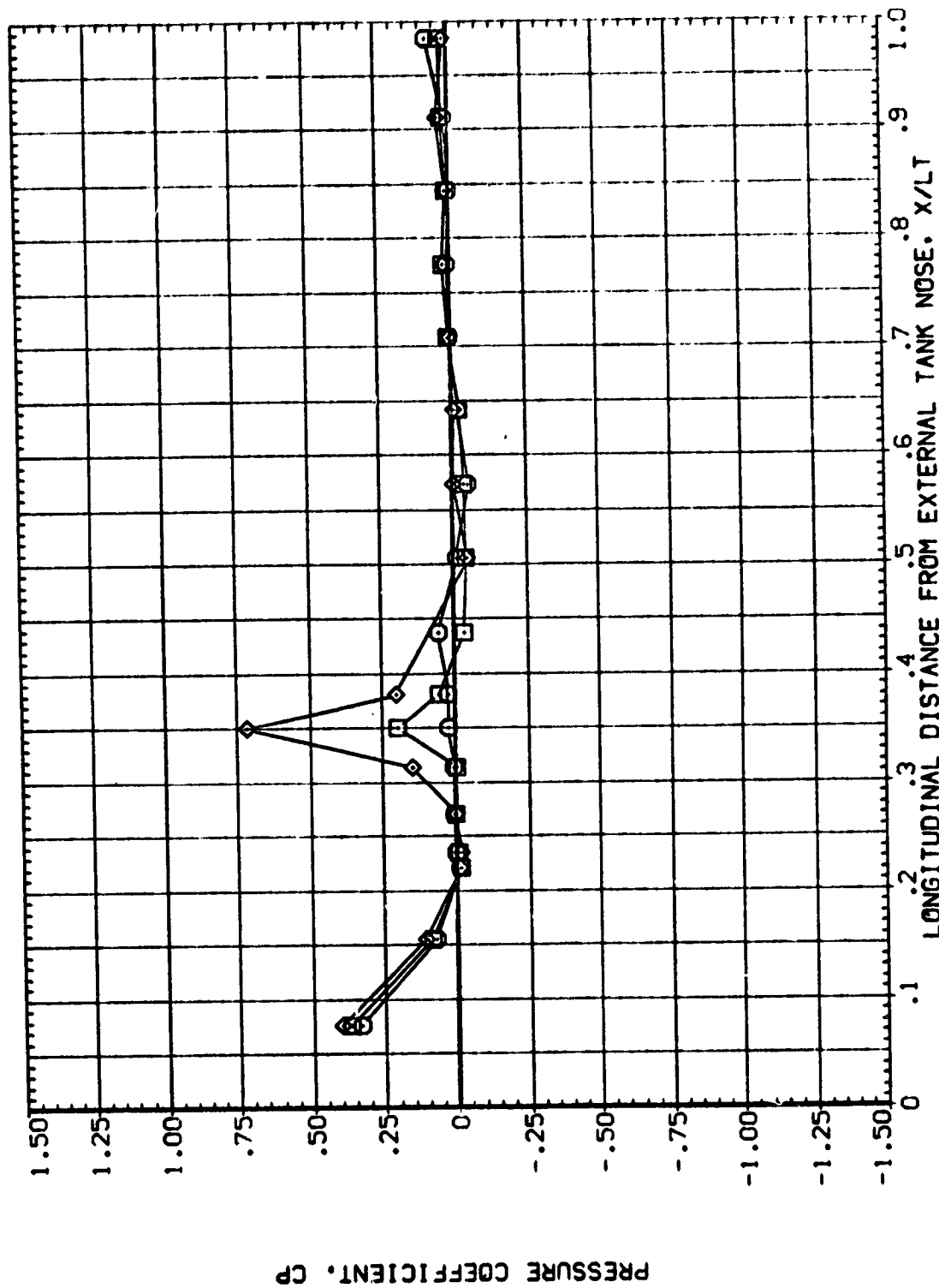
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIG	90.000
□	.000	.000	3.480	5.313	5.313	5.313	2.549	IN.	DELTAZ	.140	.000
◇	18.000			YMRP				IN.	X-SRB	.000	.000
	36.000			ZMRP				IN.	ORBITAL	.500	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

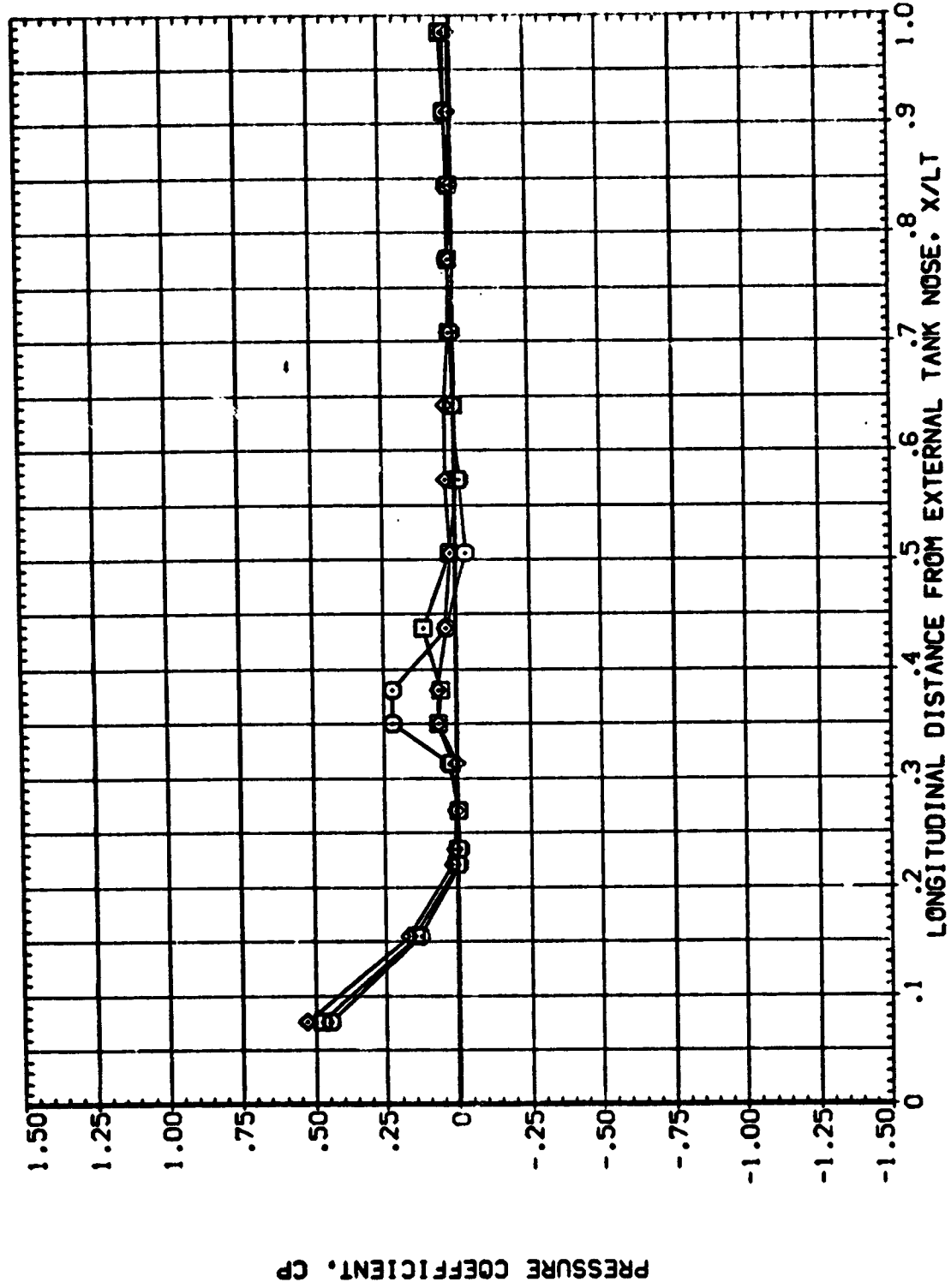
SYMBOL		PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
○	54.000	72.000	90.000	.000	3.480			SREF	6.198	50. IN.	DELTA Z	5.000	CONF 16
								LREF	5.313			.140	RUDER
								BREF	5.313			.000	ORB INC
□	90.000							XPRP	2.548	IN.	X-SRB		
								ZPRP	.000				
◇										IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

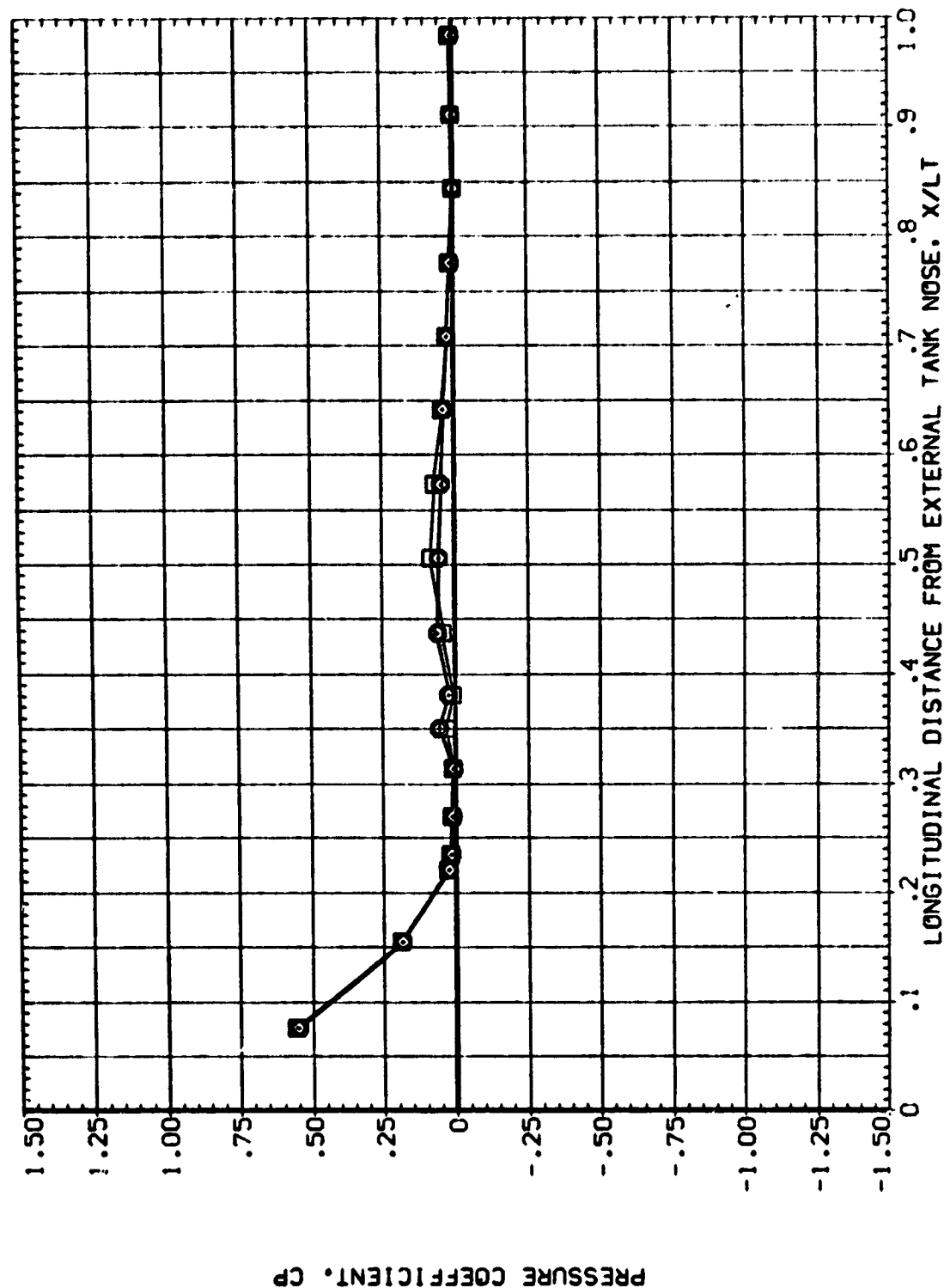
SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000			SREF	LREF	BREF	XREF	ALPHA	CONF 16	RUDER	ORBITC
○			.000	3.480	6.158	5.313	5.313	2.549	.000	.140	.000	90.000
□												.000
◇												.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

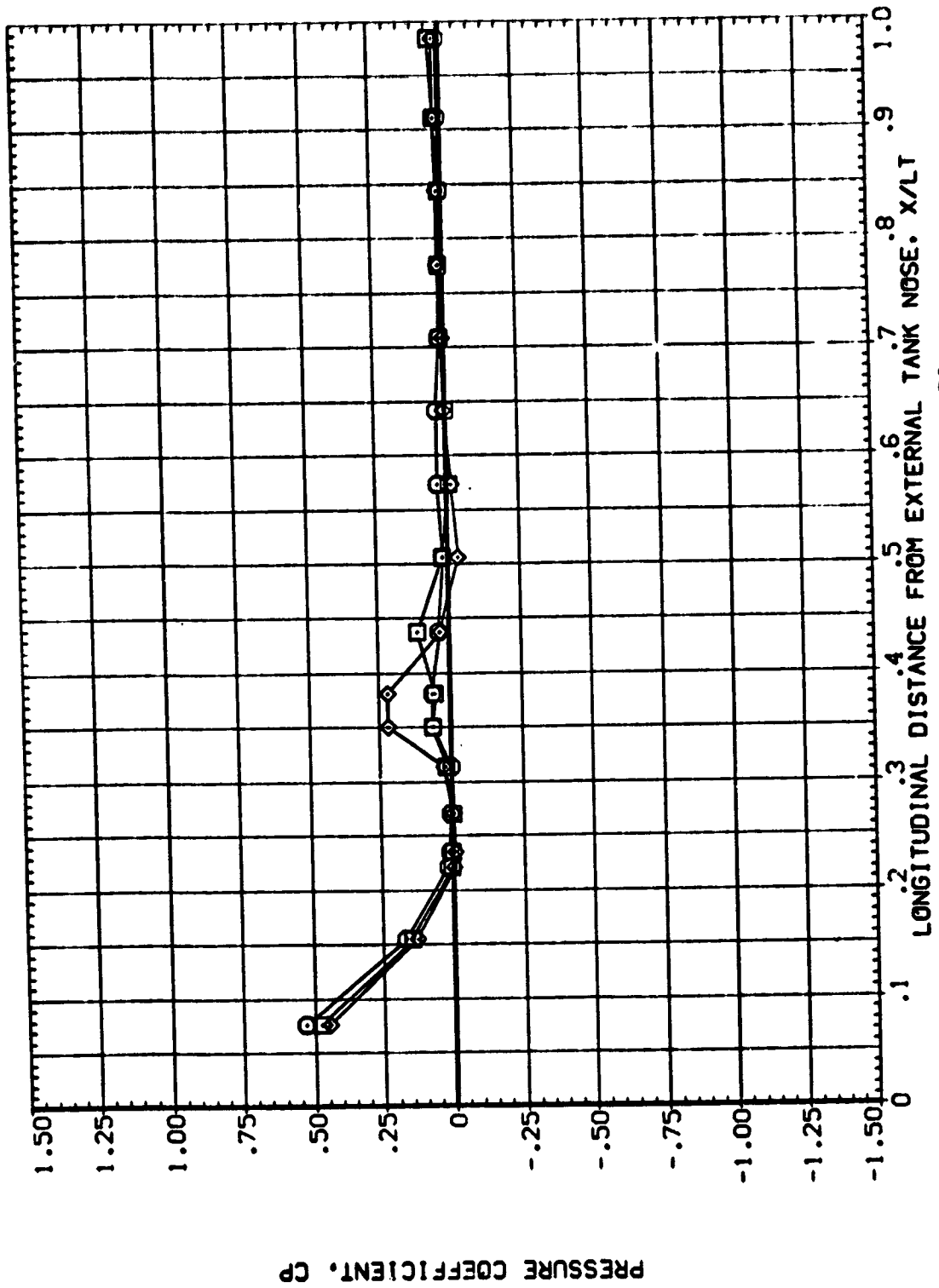
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	CONF IG	90.000
□	162.000	.000	3.480	5.313	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
◇	180.000							IN.	X-SRB	.000	.500
◇	198.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

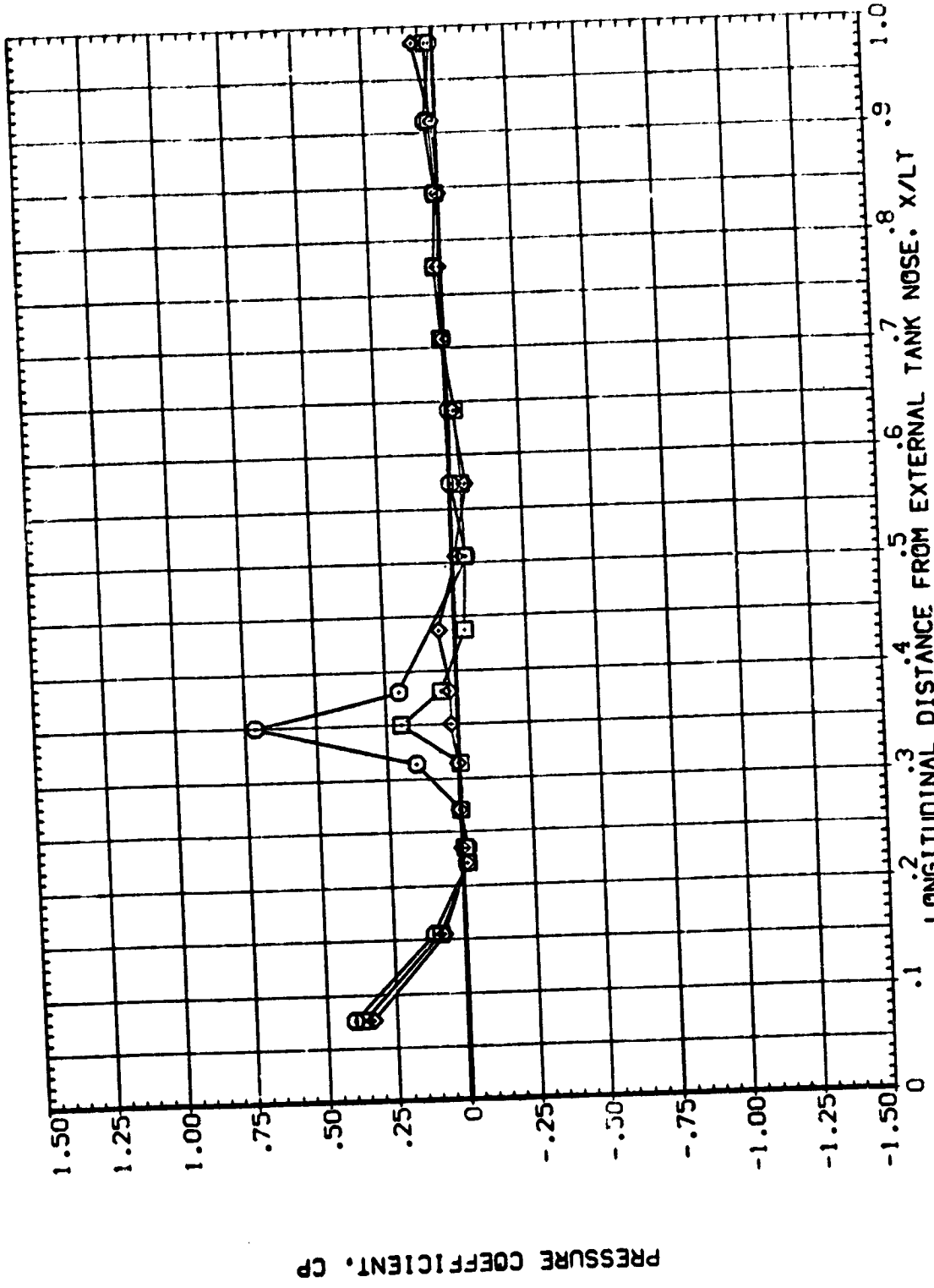
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO.IN.	ALPHA	CONFIS	CONFIS
○	216.000	.000	3.480	6.198	5.313	5.313	2.549	IN.	DELTAZ	.140	RUDDER
□	234.000							IN.	X-SRB	.000	ORBITAL
◇	252.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

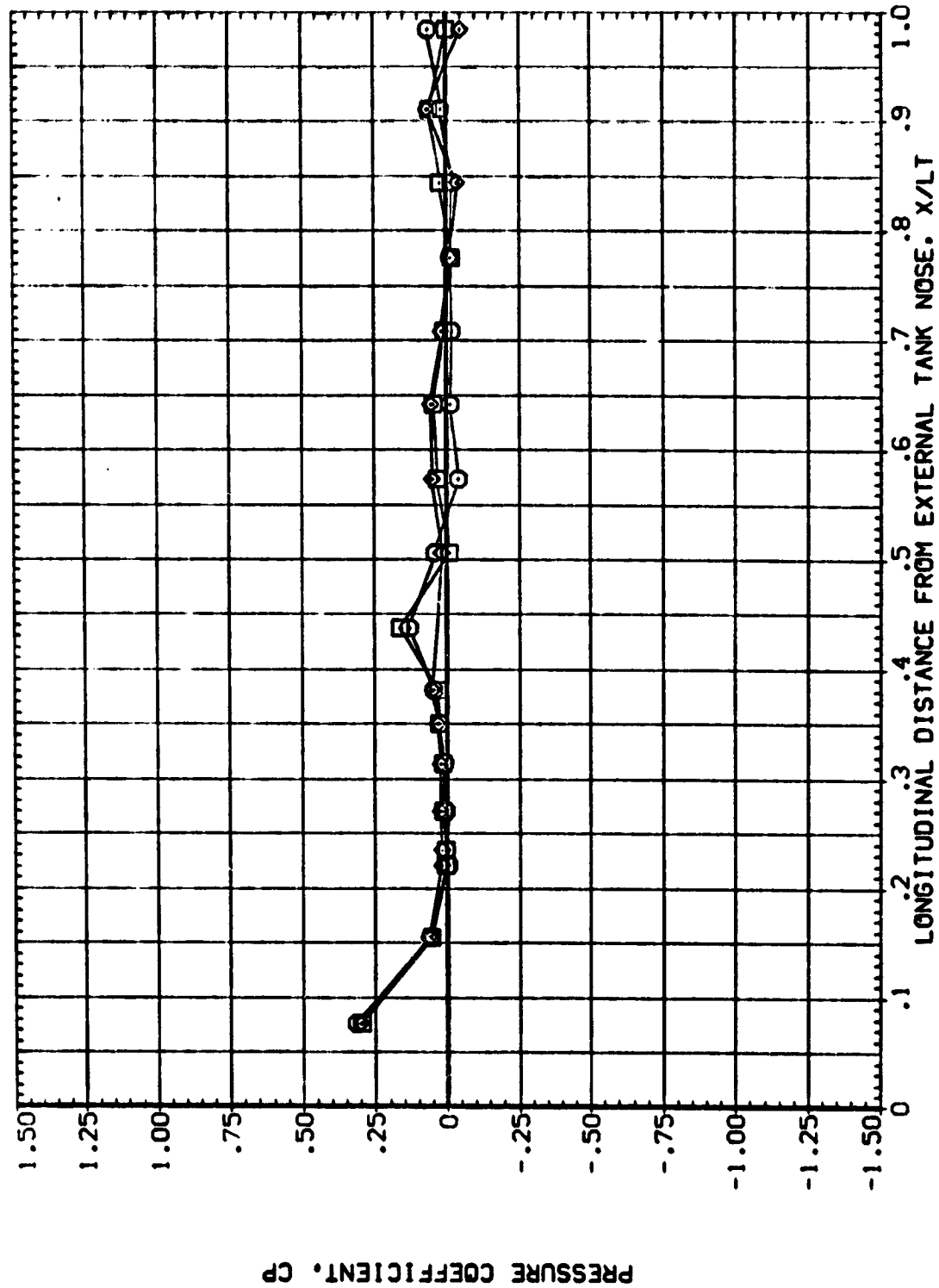
SYMBOL		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
PHI	270.000		.000		3.480	SREF	6.198	SO. IN.	5.000	CONF16	90.000
	288.000					LREF	5.313	IN.	.140	RLTJER	.000
	306.000					BREF	5.313	IN.	.000	ORGINC	.500
						VMRP	2.549	IN.			
						ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

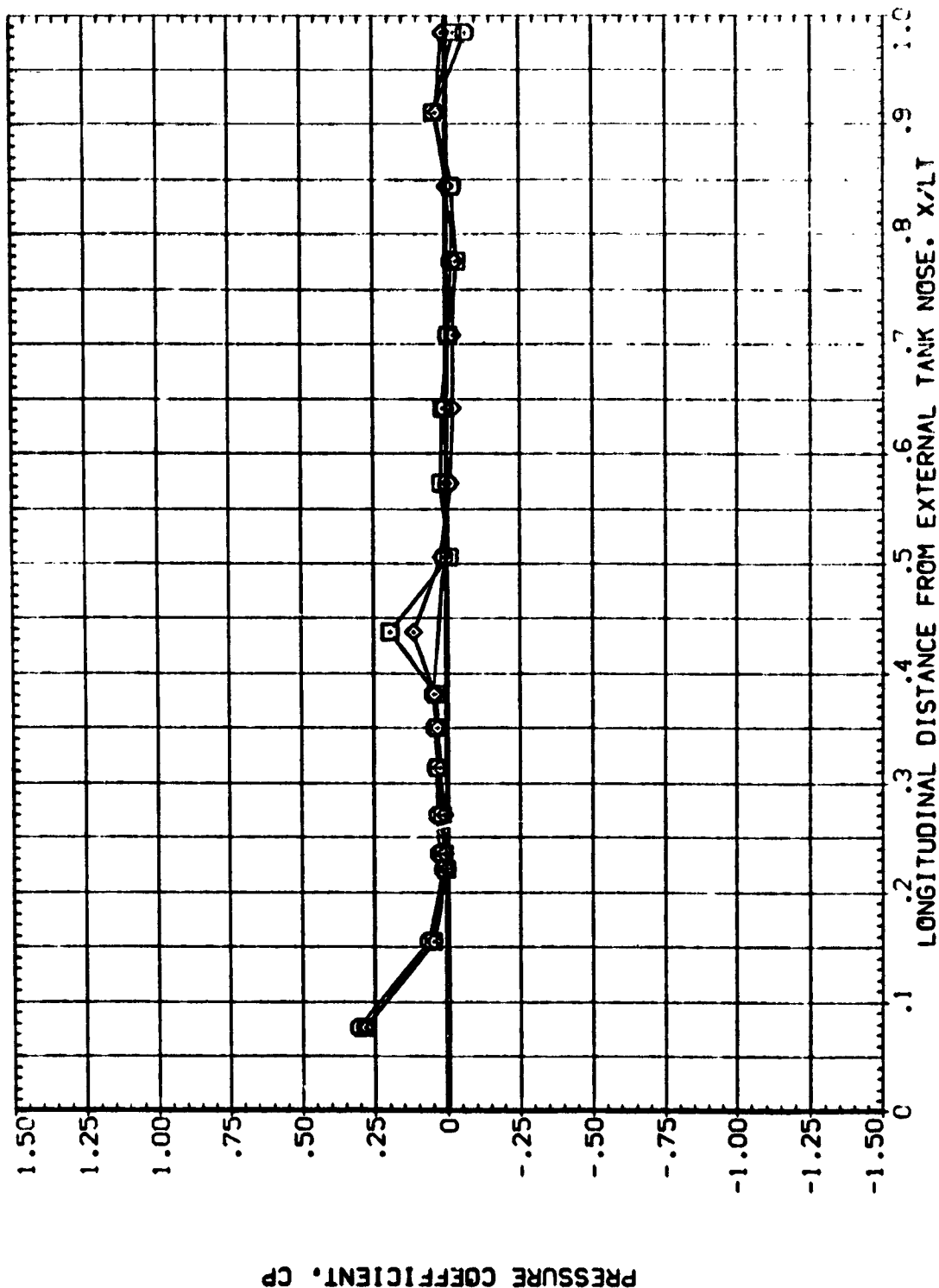
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	324.000	342.000	.000	3.480	SREF	SO. IN.	ALPHA	CONF IG
○					LREF	IN.	DELTA Z	RLODER
□					BREF	IN.	X-SRB	.000
◇					XMRP	IN.		OR8INC
					VMRP	IN.		
					ZMRP	IN.		
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PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	SC. IN.
○	.000	4.000	3.480	6.198	5.313	5.313	2.549	IN.	DELTA Z	R-100	.000
□	18.000							IN.	N-S98	DR-100	.000
◇	36.000							IN.		DR-100	.000

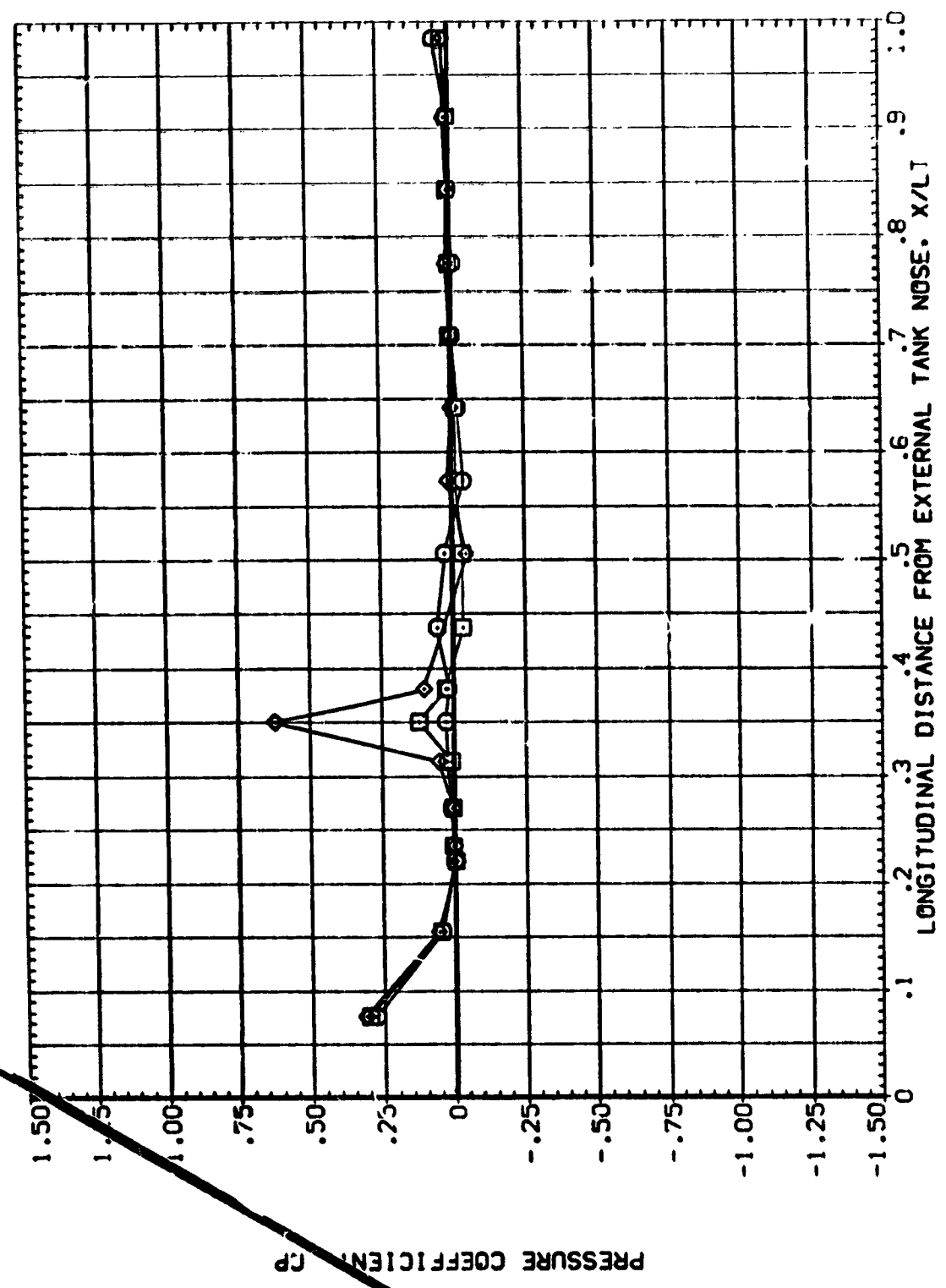


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03      EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIG	90.000
◇	54.000	4.000	3.480	5.313	5.313	5.313	2.549	IN.	DELTA2	RUDDER	.000
□	72.000			2.000				IN.	Y-SRB	ORBITAL	.500
◇	90.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
○  
□  
◇

PHI  
109.000  
126.000  
144.000

BETA  
4.000

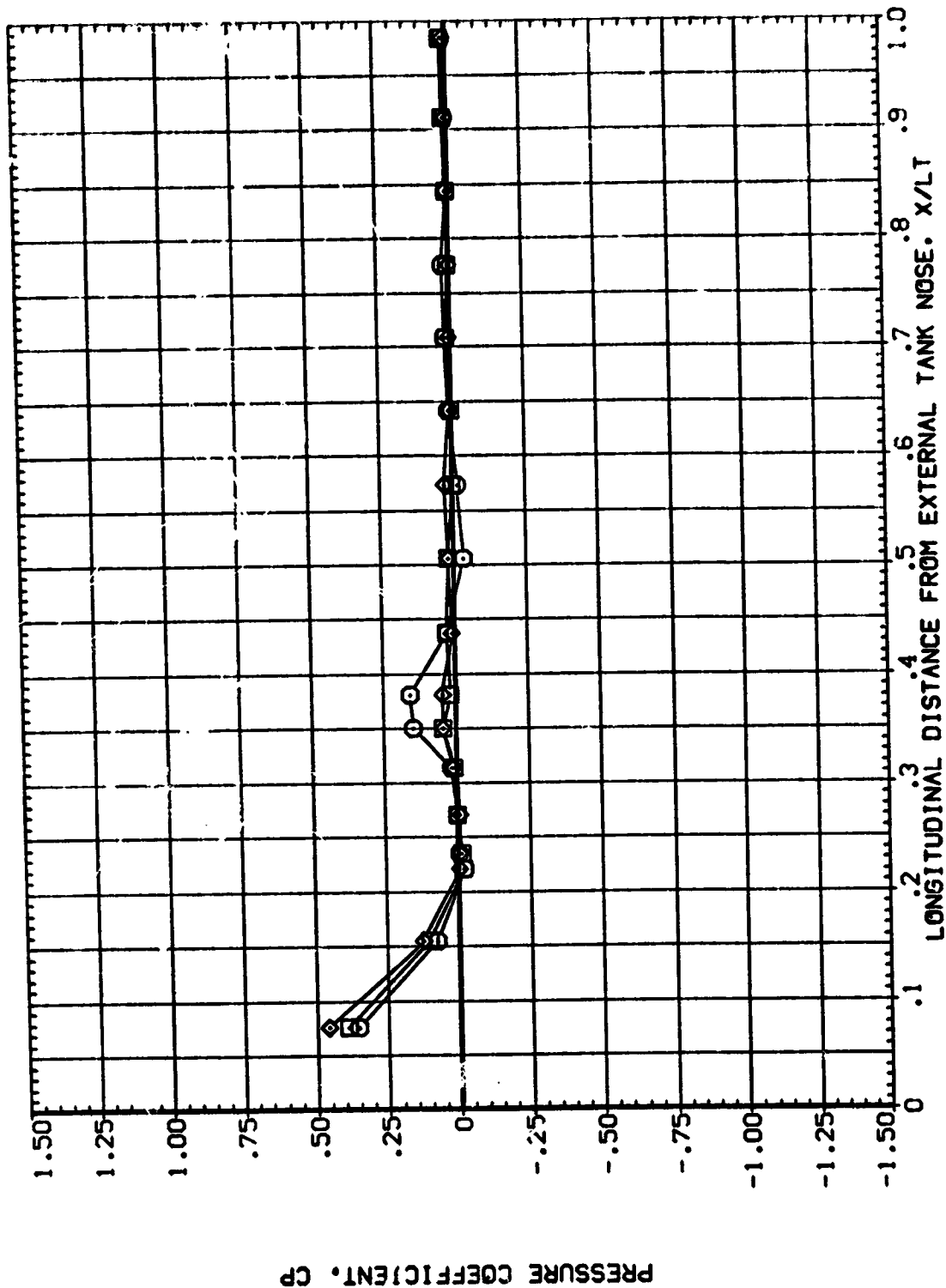
MACH  
3.480

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA2  
X-S98

PARAMETRIC VALUES  
S.C00 50.000  
.140 .000  
RUDDER .000  
ORBITALC .500

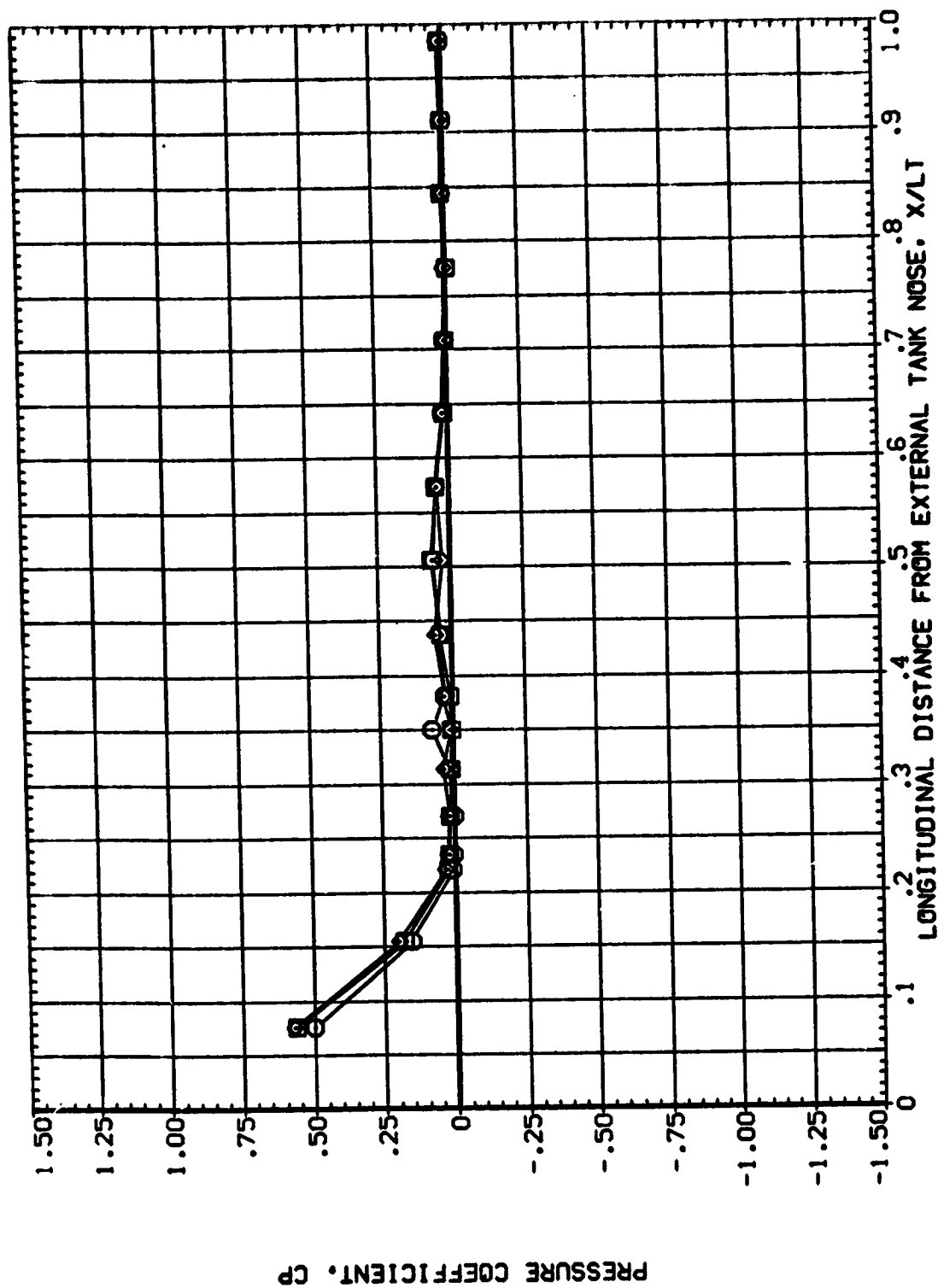


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

C-4

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

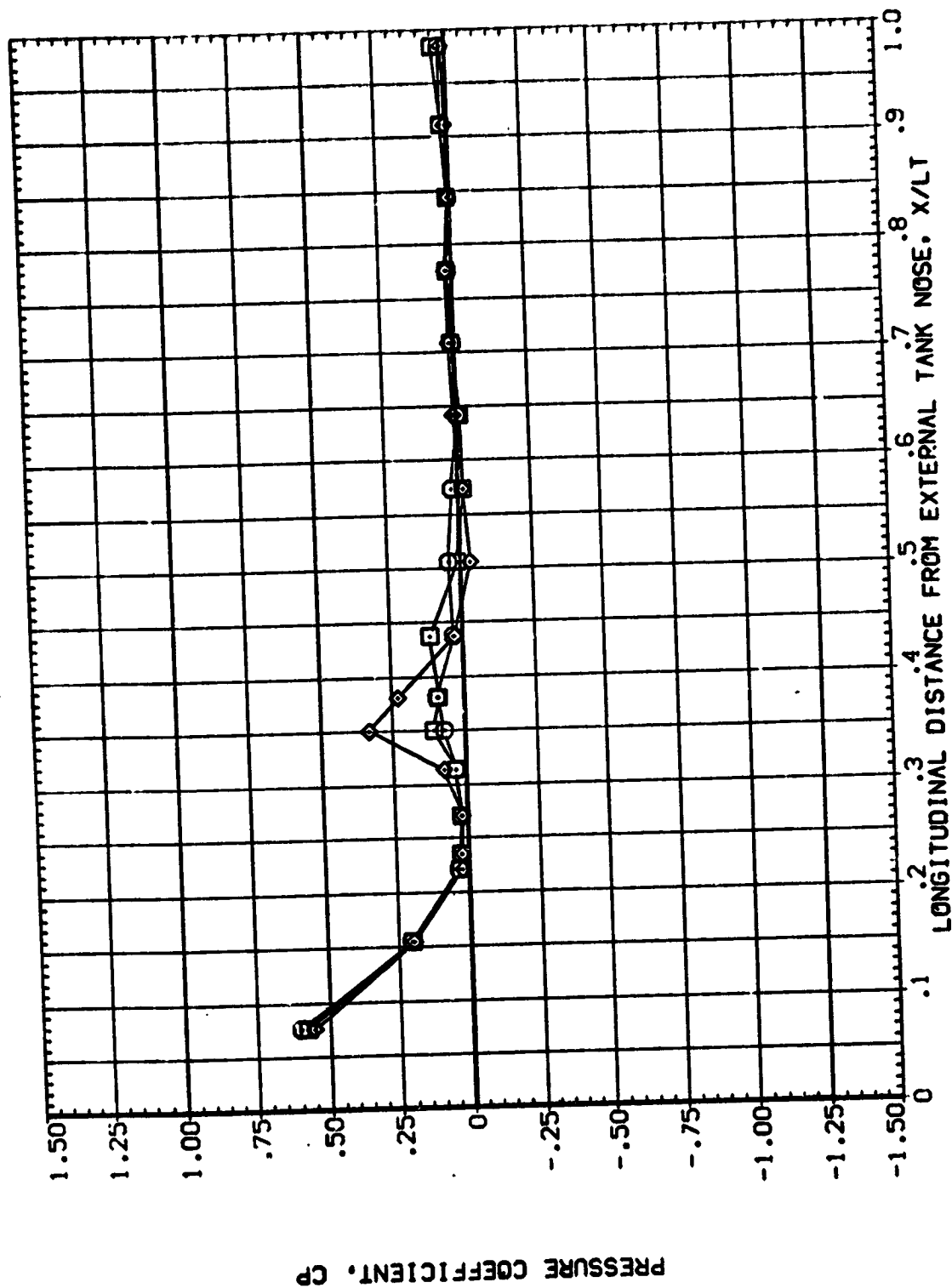
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	ALPHA	5.00C	CONF'IG	90.00C	
○	162.000	4.000	3.480	LREF	DELTAZ	.140	R/CORR	.000	
□	180.000			BREF	X-S98	.000	DSBINC	.500	
◇	198.000			XPRP					
				ZPRP					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
				SREF	SD. IN.	DELTA Z	CONF IG	RUDDER	
○	216.000	4.000	3.480	5.313	IN.	X-SRB	.000	.000	90.000
□	234.000			2.549	IN.		.140	.000	.000
◇	252.000			.000	IN.		.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
◇  
□

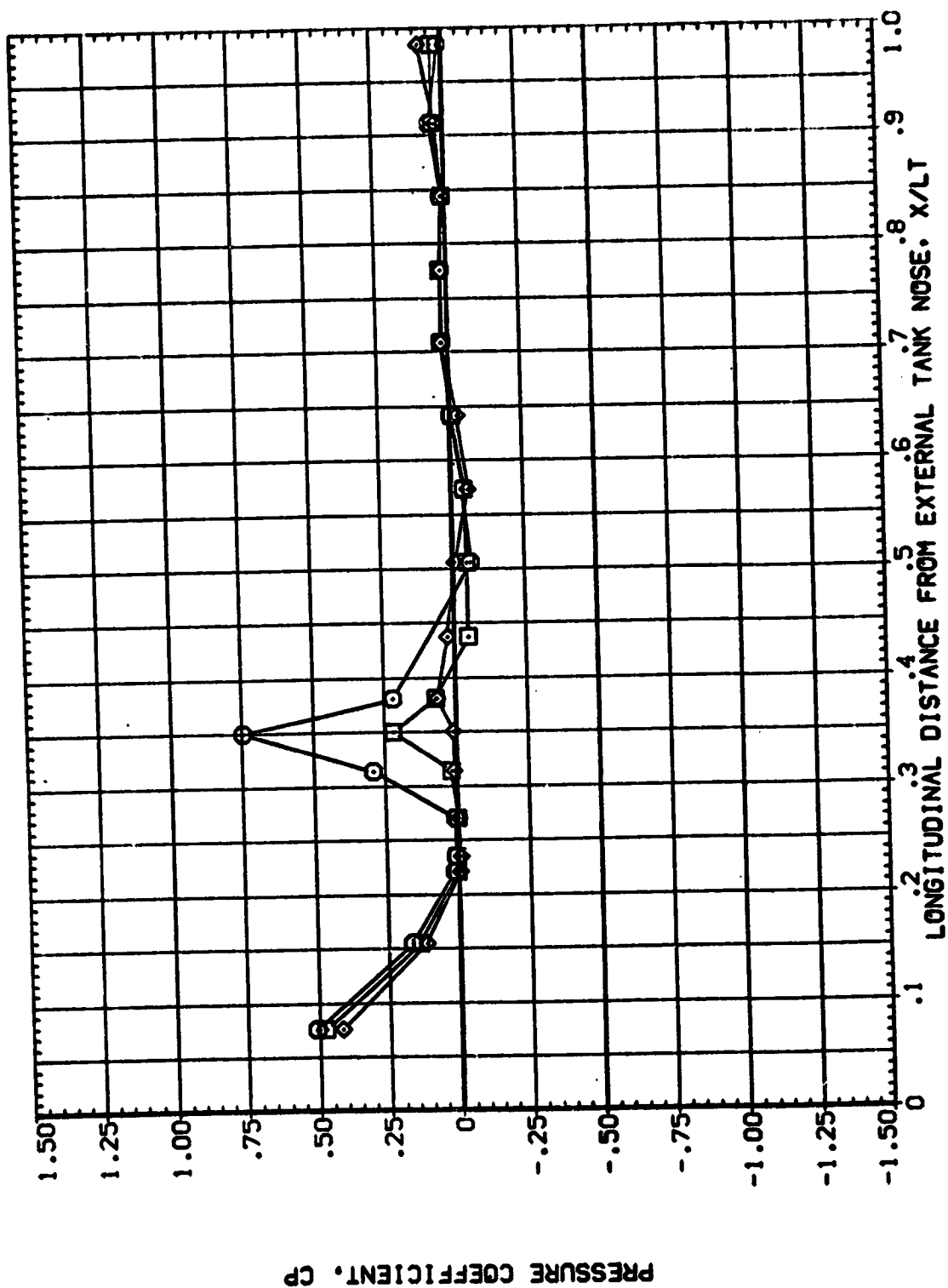
PHI 270.000  
288.000  
306.000  
BETA 4.000  
MACH 3.480

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

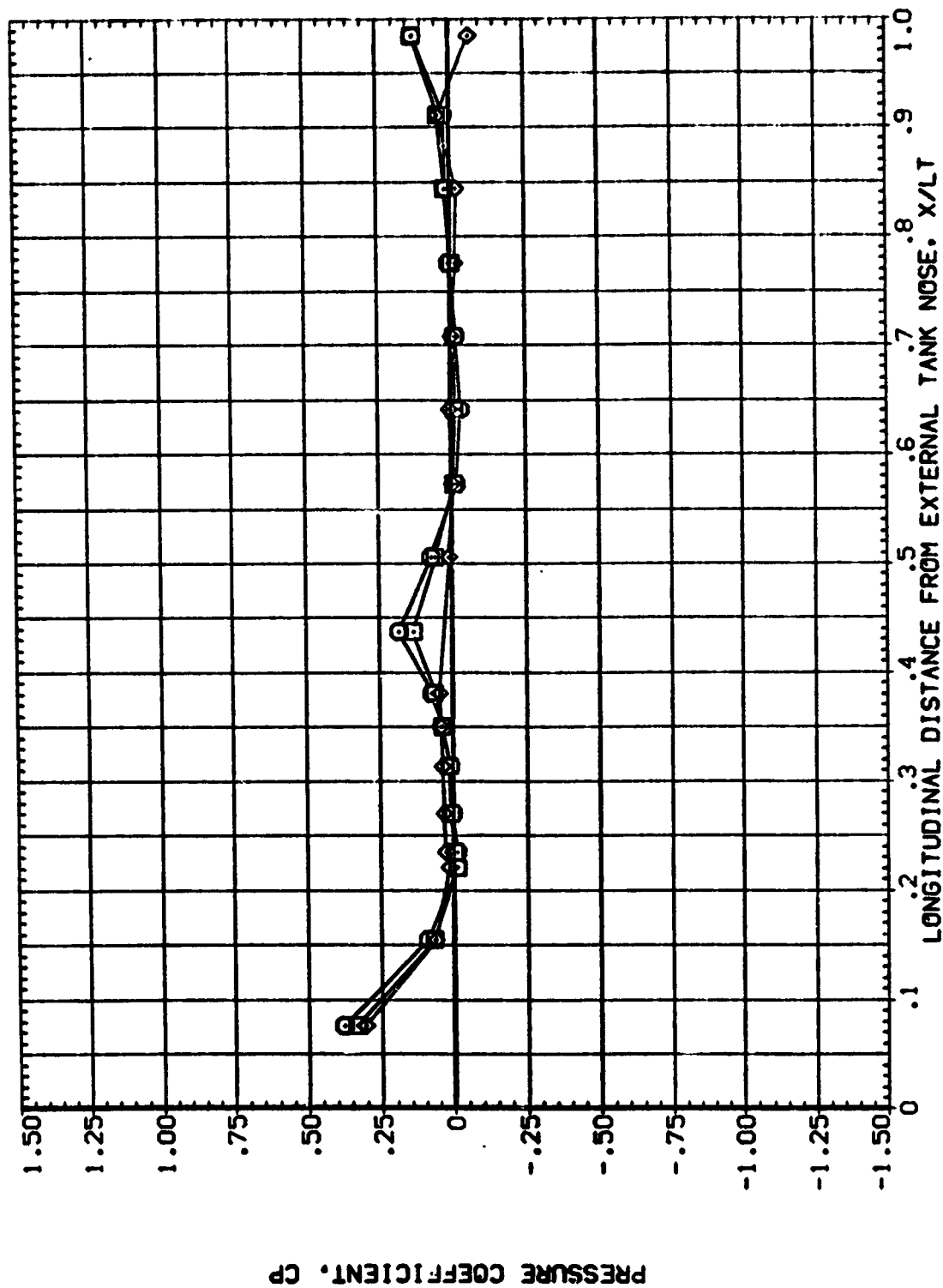
PARAMETRIC VALUES  
5.000  
.140  
.000  
CONFIG  
PJORDER  
OFSINC  
50.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	ALPHA	CONF IG	90.003
○	324.000	4.000	3.480	6.198	5.313	5.313	2.549	IN.	DELTA Z	R-CDER	.000
□	342.000							IN.	X-SRB	ORBITAL	.500
◇	360.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# EXTERNAL TANK (A82T04)

MSFC 567(1A32F) T9 S3/2 S3/2 03

SYMBOL  
 ○  
 □  
 ◇

PHI  
 .000  
 18.000  
 36.000

BETA  
 -4.000  
 MACH  
 .900

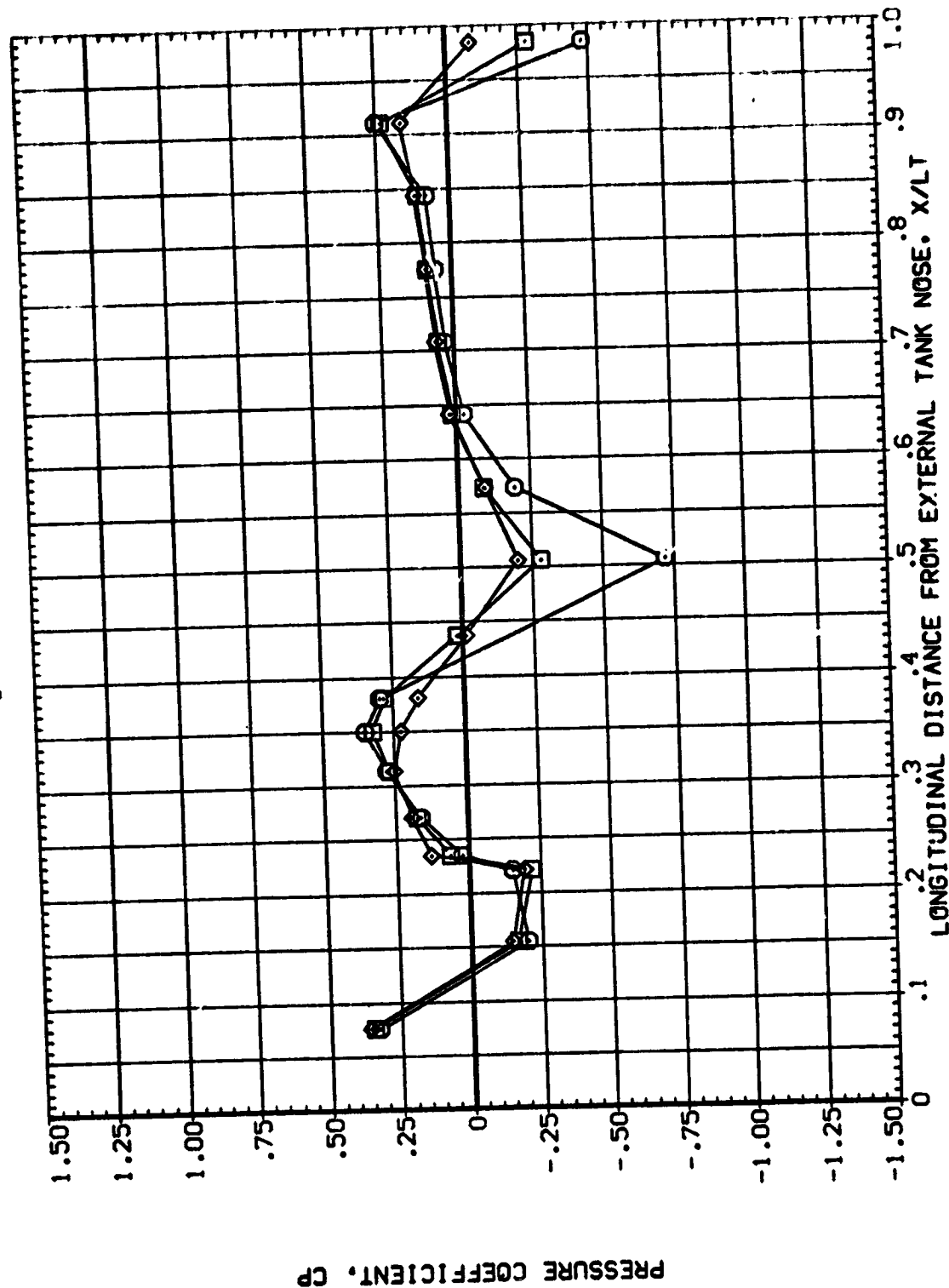
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000

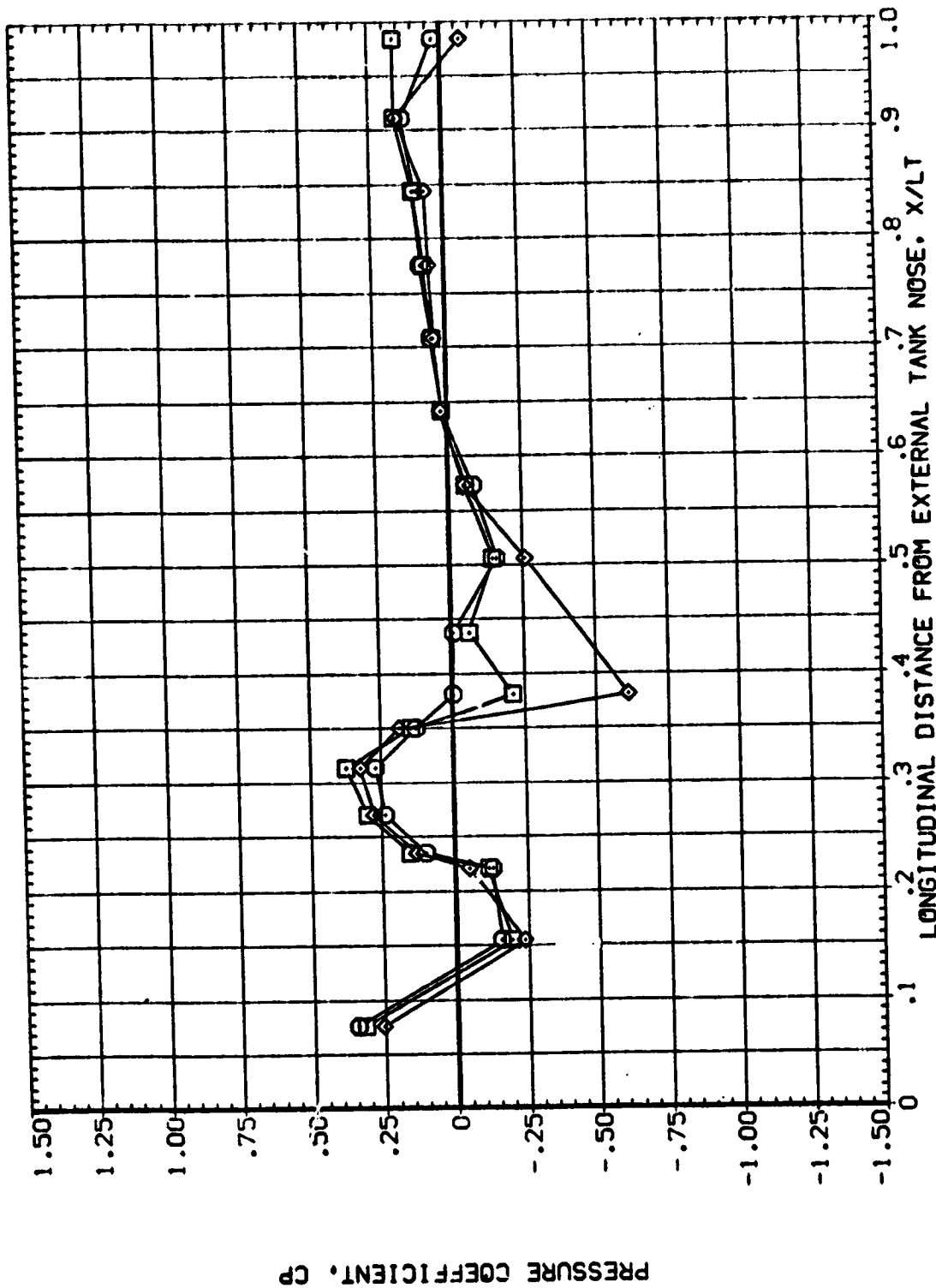
CONFIG  
 RUDDER  
 C-81.5C  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA						PARAMETRIC VALUES																					
	54.000	72.000	90.000	-4.000	.900		SREF	LREF	BREF	XMRP	ZMRP	6.198	5.313	5.313	2.549	.000	.000	IN.	IN.	IN.	IN.	ALPHA	DELTAZ	X-SRB	-5.000	.140	.000	CONFIG	RUDDER	ORBIT INC	90.000	.000	.500	
○																																		
□																																		
◇																																		



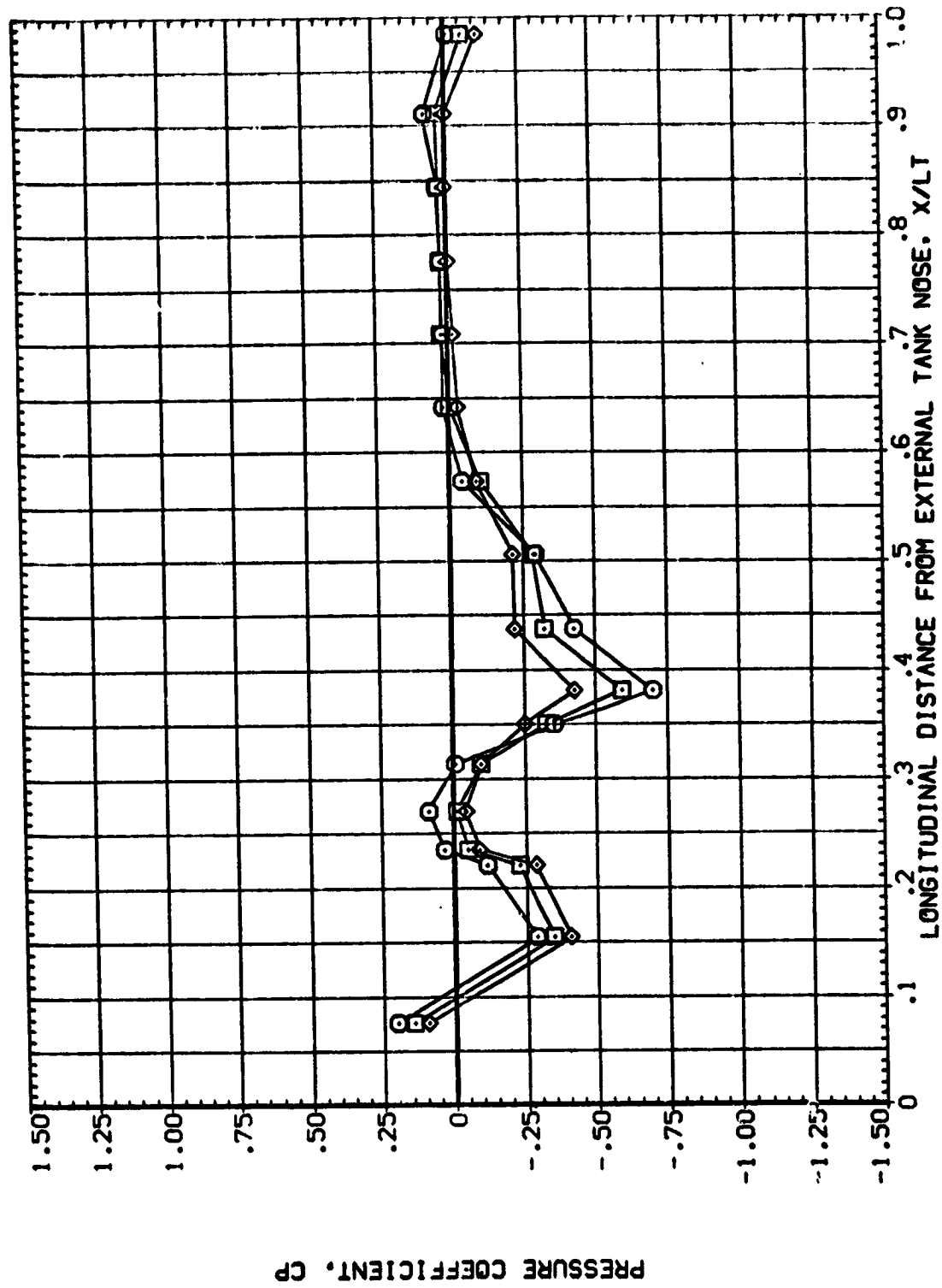
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000			SREF	LREF	BREF	XPRP	SO. IN.	ALPHA	CONFIG	90.000
○	108.000	126.000	-4.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	108.000	126.000	-4.000	.900	6.198	5.313	5.313	2.549	IN.	X-SRB	.000	.000
◇	108.000	126.000	-4.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL  
 ○  
 □  
 ◇

PMI 162.000  
 180.000  
 198.000

BETA -4.000

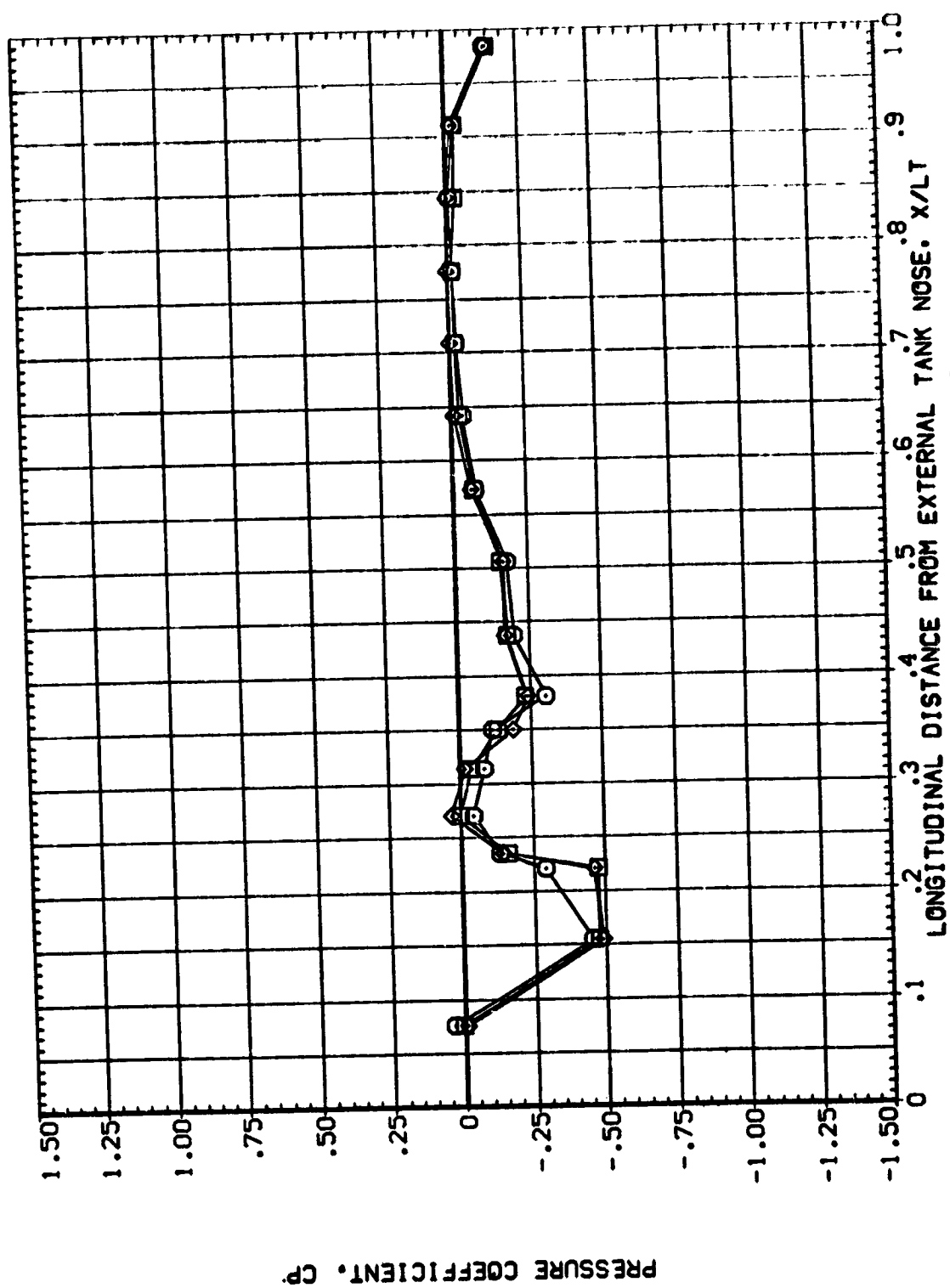
MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .500

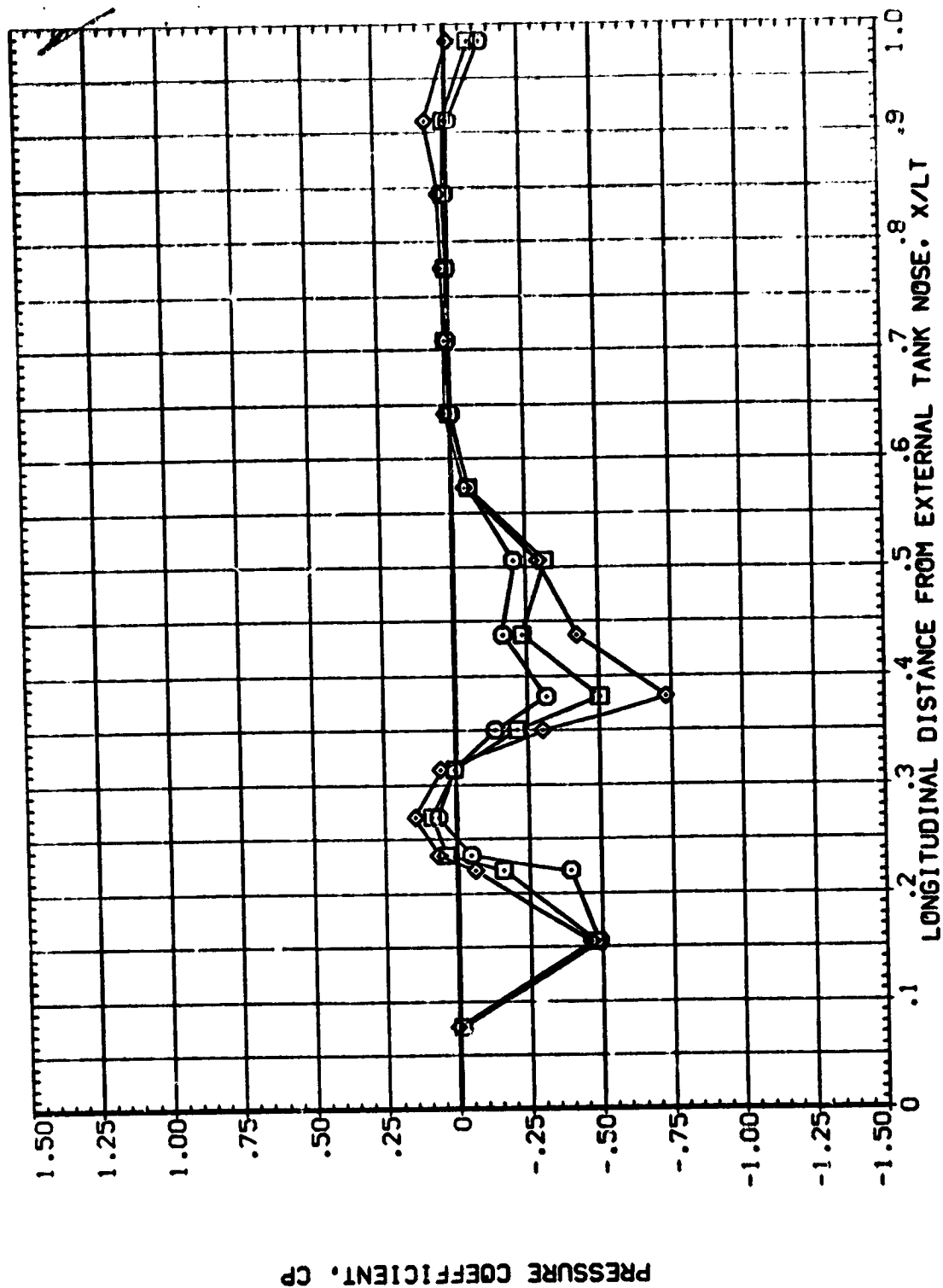


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	216.000	234.000			SREF	LREF	DREF	XMRP	YMRP	ZMRP	SQ. IN.	IN.
○	216.000	234.000	-4.000	.900	5.198	5.313	5.313	2.549	.000	.000	50.000	IN.
□	216.000	234.000	-4.000	.900	5.198	5.313	5.313	2.549	.000	.000	50.000	IN.
◇	216.000	234.000	-4.000	.900	5.198	5.313	5.313	2.549	.000	.000	50.000	IN.



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03

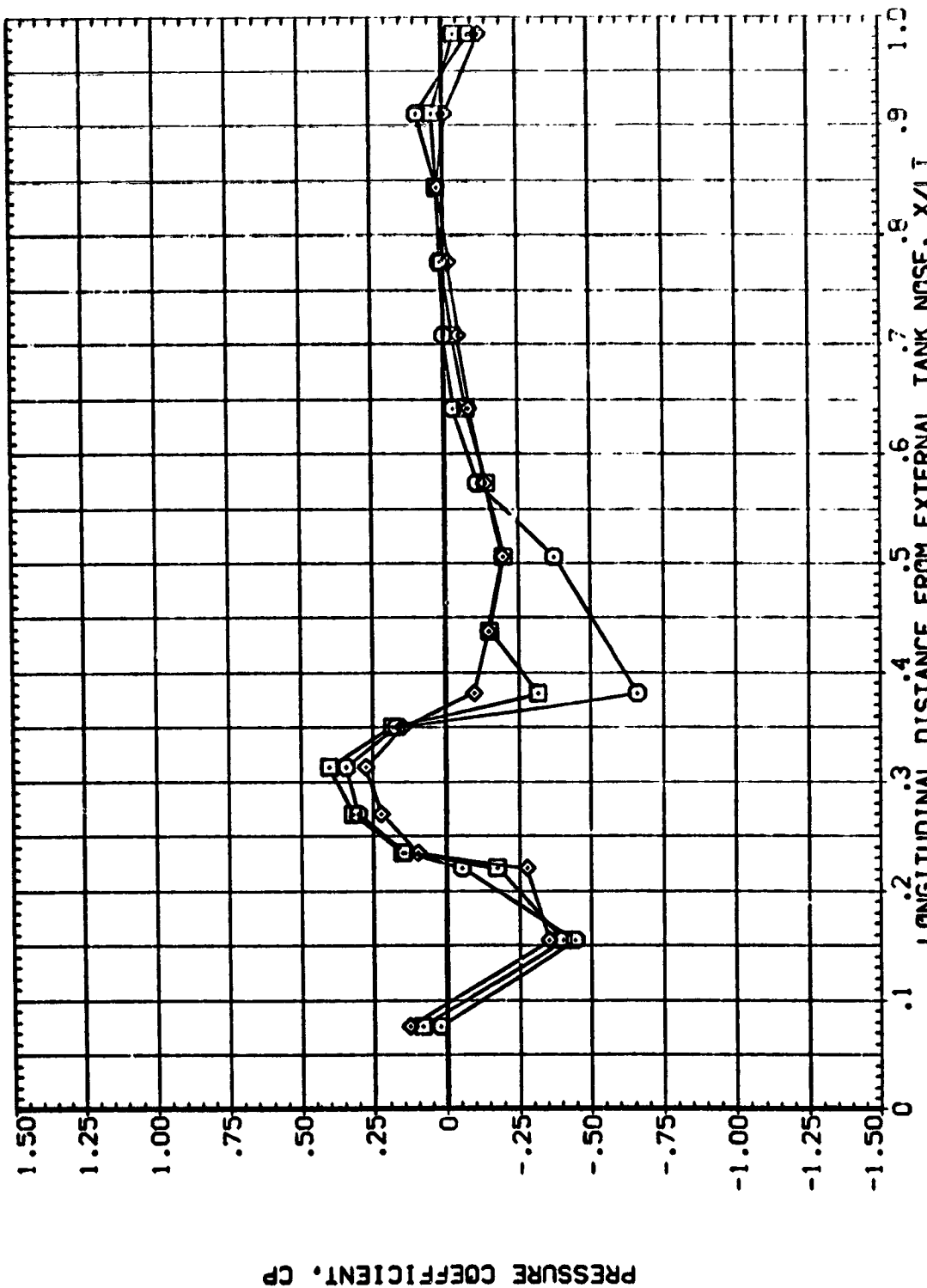
**SYMBOLS**

PHI	BETA	MACH
270.000	-4.000	.900
289.000		
306.000		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

PARAMETRIC VALUES	
ALPHA	-5.000
DELTA Z	.140
X-SRB	.000

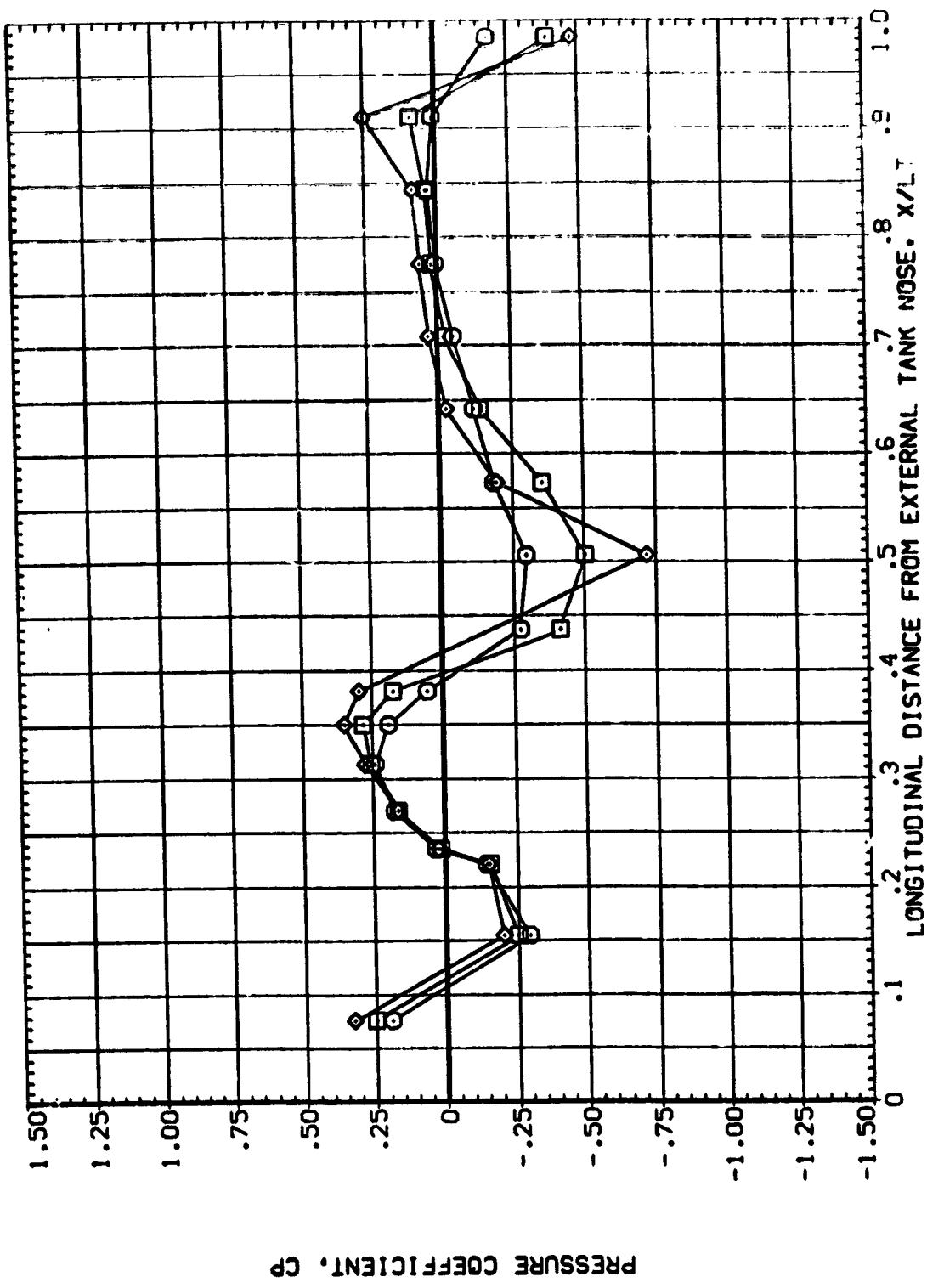
305  
300  
300-05



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

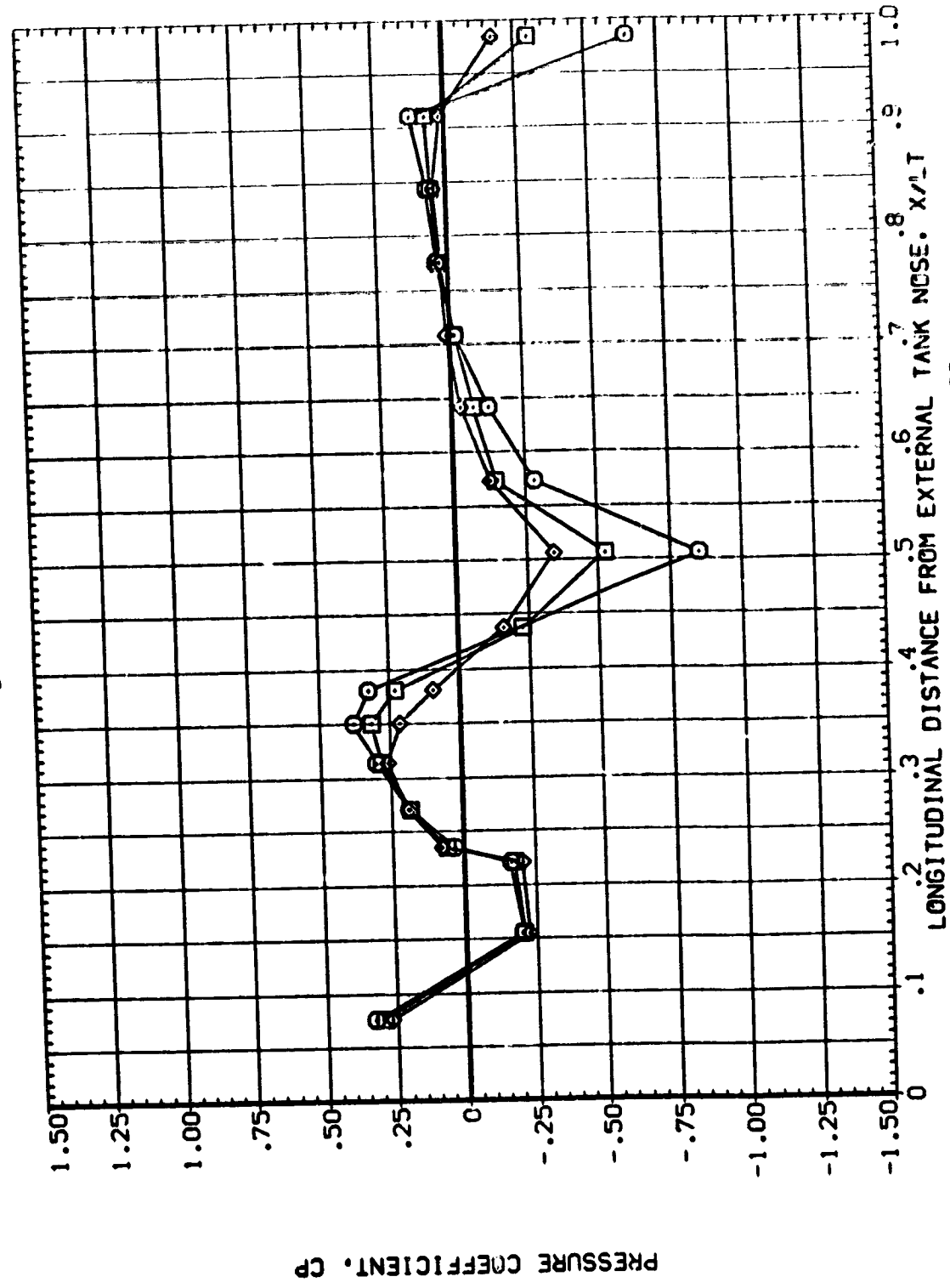
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		ALPHA		PARAMETRIC VALUES		
				SREF	SO.IN.	DELTAZ	X-SRB	-5.000	CONFIG	50.000
□	324.000	-4.000	.900	LREF	5.313	IN.		.140	RLODER	.000
◇	342.000			SREF	5.313	IN.		.000	ORGINC	.500
	360.000			XREF	2.549	IN.				
				YREF	.000	IN.				
				ZREF	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82124)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONFID	ROTTER	WEIGHT
○	.000	.000	.900	6.198	5.313	5.313	2.549	DELTA Z	-5.000	.140	.000
□	18.000							X-S98	.000	.000	.500
◇	36.000										

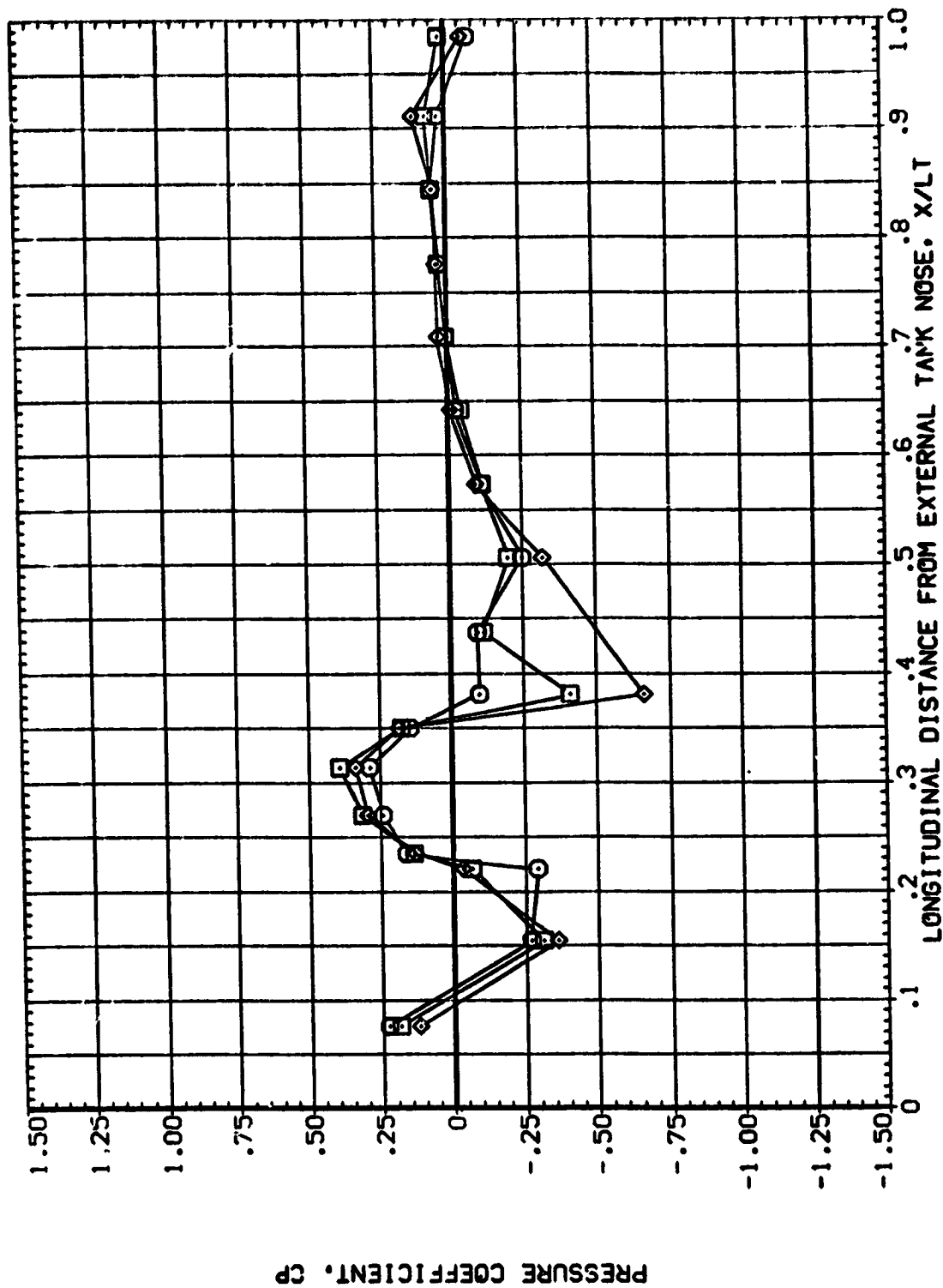


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
	54.000	72.000	.000	.000	.900		SREF	6.198	50. IN.	DELTAZ	-5.000	CONF IG
○	72.000						LREF	5.313	IN.	X-SRB	.140	RUDDER
□	90.000						YMRP	2.544	IN.		.000	ORIGIN
◇							ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

**SYMBOL**

**PHI**  
**108.000**  
**126.000**  
**144.000**

**0001**  
**BETA**

06.  
MACH

1985

## REFERENCE

1998 313

in.

ALP  
MEI

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8849

16  
15  
14

05.00

□◇

126.000  
144.000

1. **NAME**  
 2. **DATE**  
 3. **TIME**

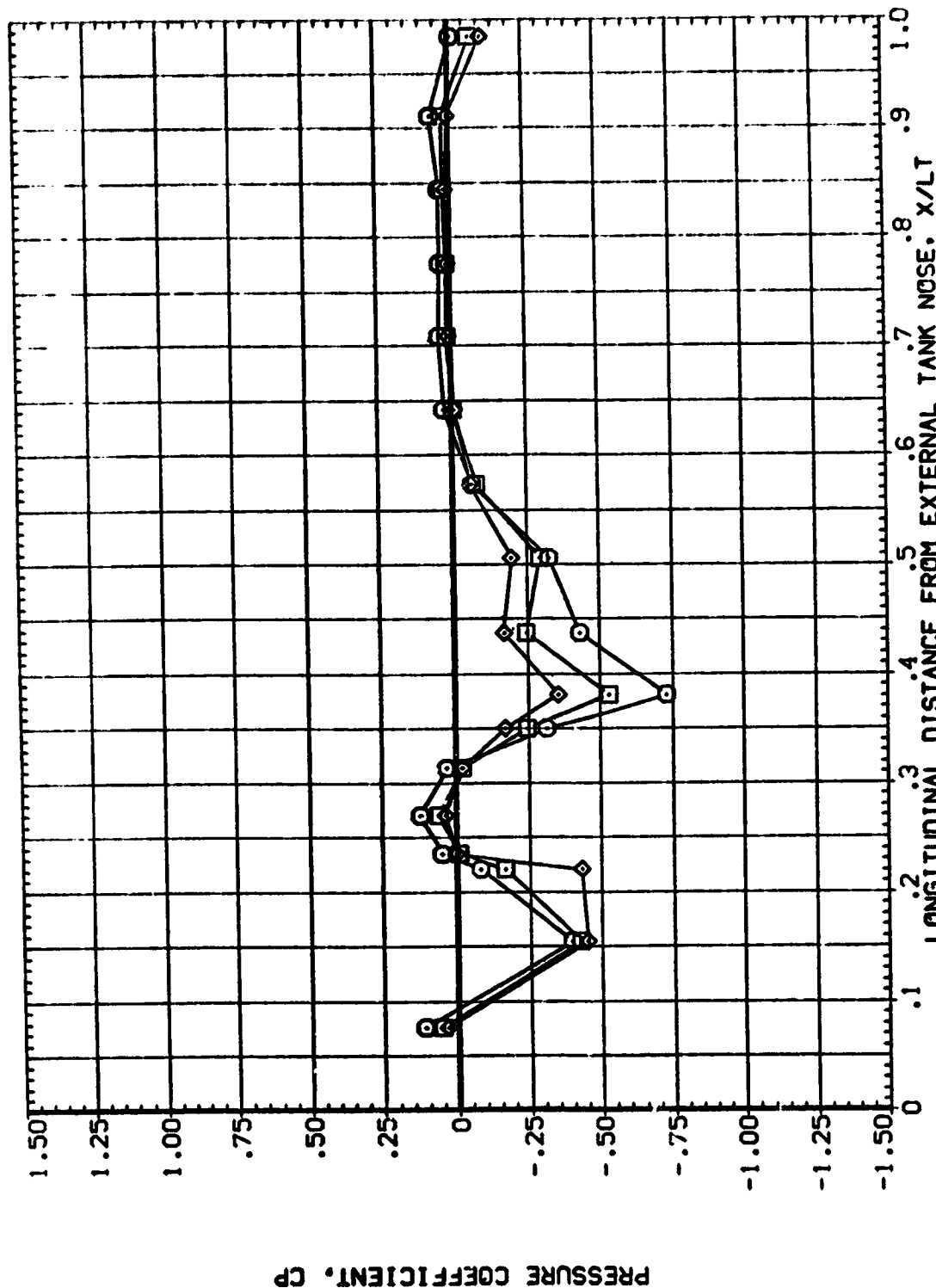
513  
549

5-X

28

**ginc**

5.

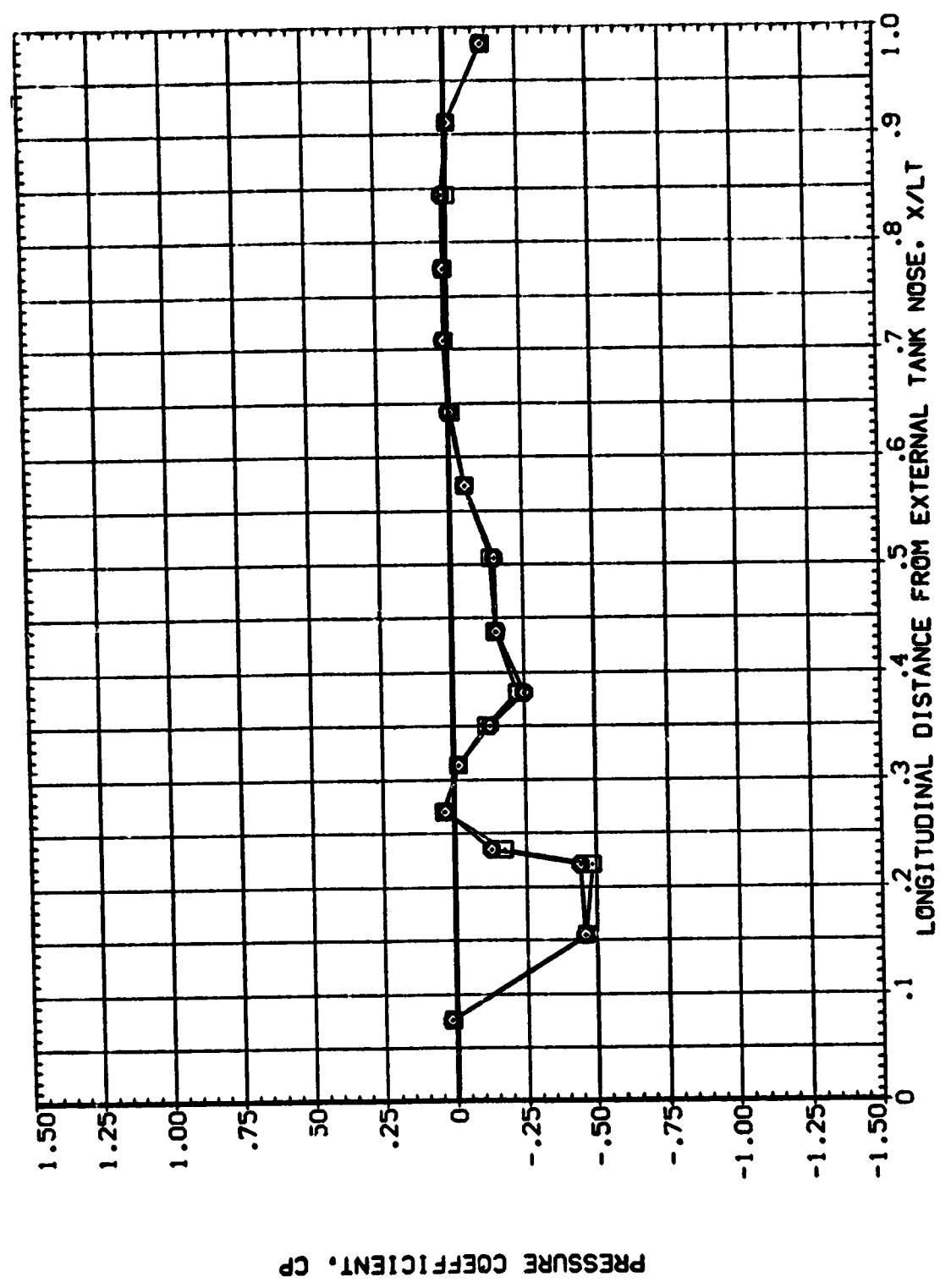


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

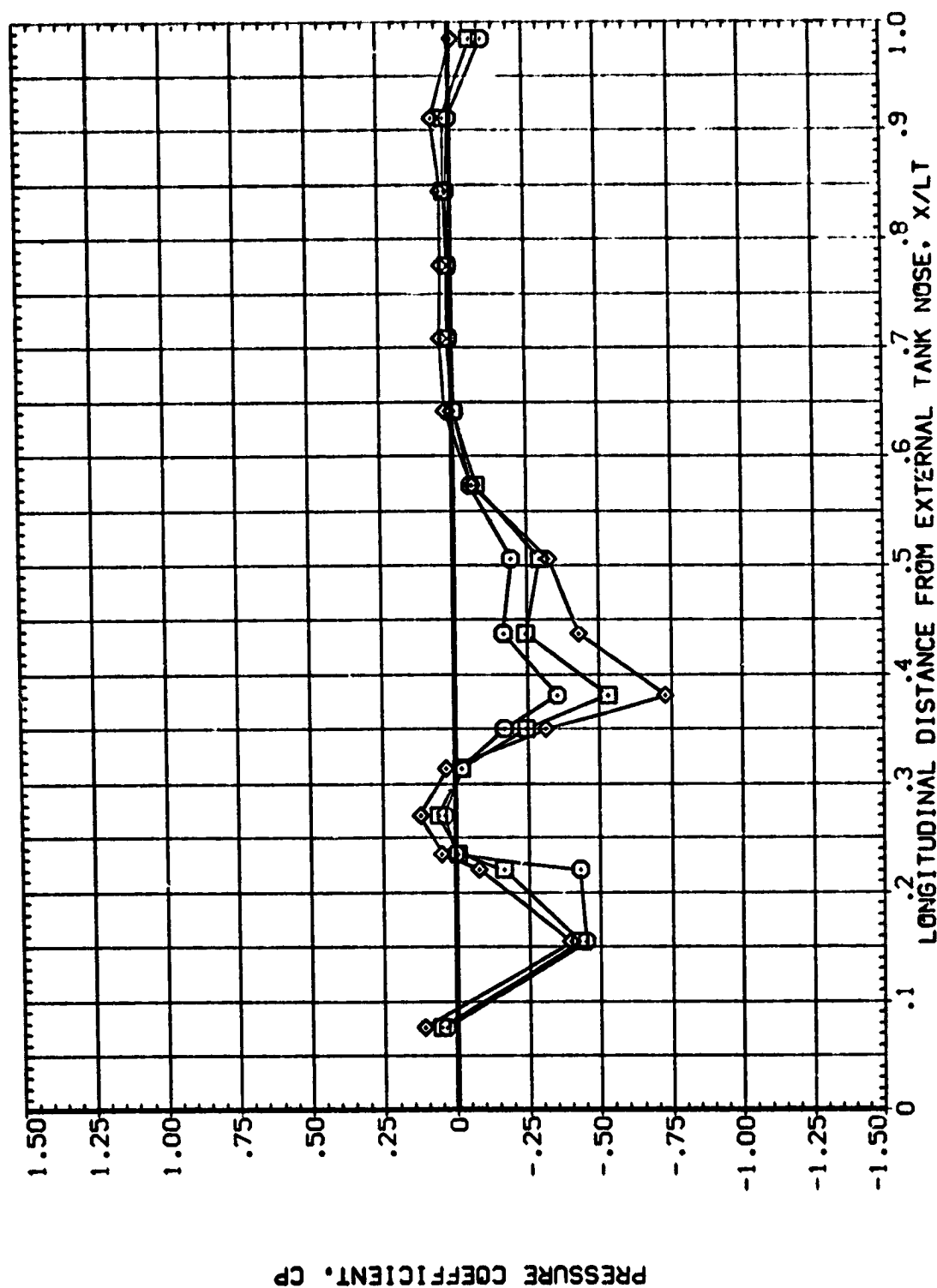
SYMBOL		PARAMETRIC VALUES	
PHI	162.000	BETA	.000
	180.000	MACH	.900
	198.000		
REFERENCE DATA		PARAMETRIC VALUES	
SREF	6.198	CONF IG	90.000
LREF	5.313	RUDDER	.000
BREF	5.313	CRBINC	.500
XMRP	2.549		
YMRP	.000		
ZMRP	.000		
		ALPHA	
		DELTA Z	
		X-SRB	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

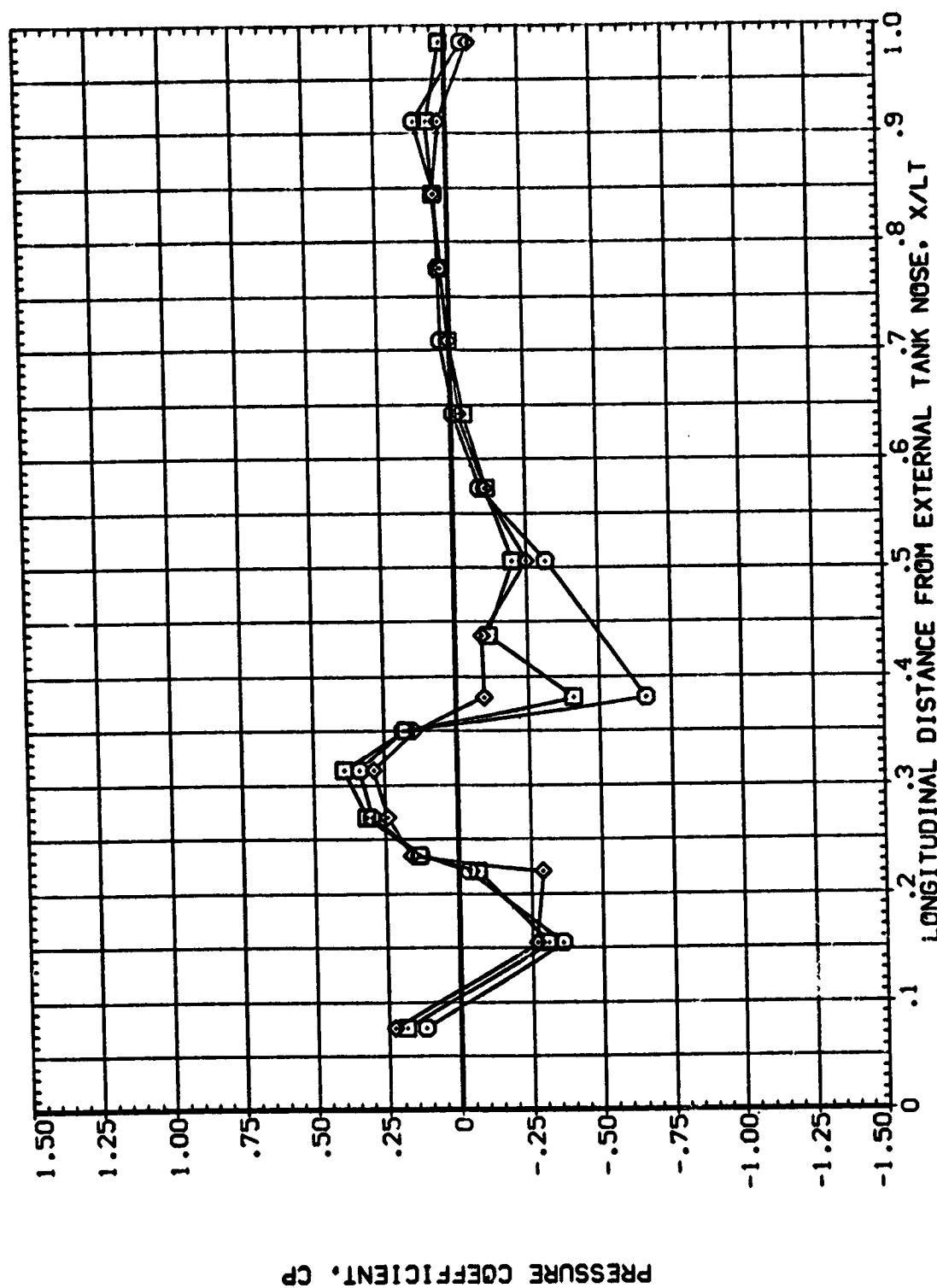
SYMBOL	PMI	BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES					
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	SO. IN.	IN.	ALPHA	DELTA Z	CONFIG	RUDDER
○	216.000	.000	.900	6.199	5.313	5.313	2.549	.000	.000	50. IN.	IN.	-5.000	.140	.000	90.000
□	234.000	.000	.900	5.313	5.313	5.313	2.549	.000	.000	IN.	IN.	.000	.000	.000	.500
◇	252.000	.000	.900	5.313	5.313	5.313	2.549	.000	.000	IN.	IN.	.000	.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IG	
□	270.000	.000	.900	6.198	IN.	ALPHA	90.000
◇	288.000			5.313	IN.	DELTA Z	.000
	306.000			5.313	IN.	X-SRB	.000
				2.549	IN.	RUDDER	.140
				.000	IN.	ORIGIN	.500
				ZMRP			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82104)

SYMBOL  
 □  
 ○  
 ◇

PHI 324.000  
 342.000  
 360.000

BETA .000

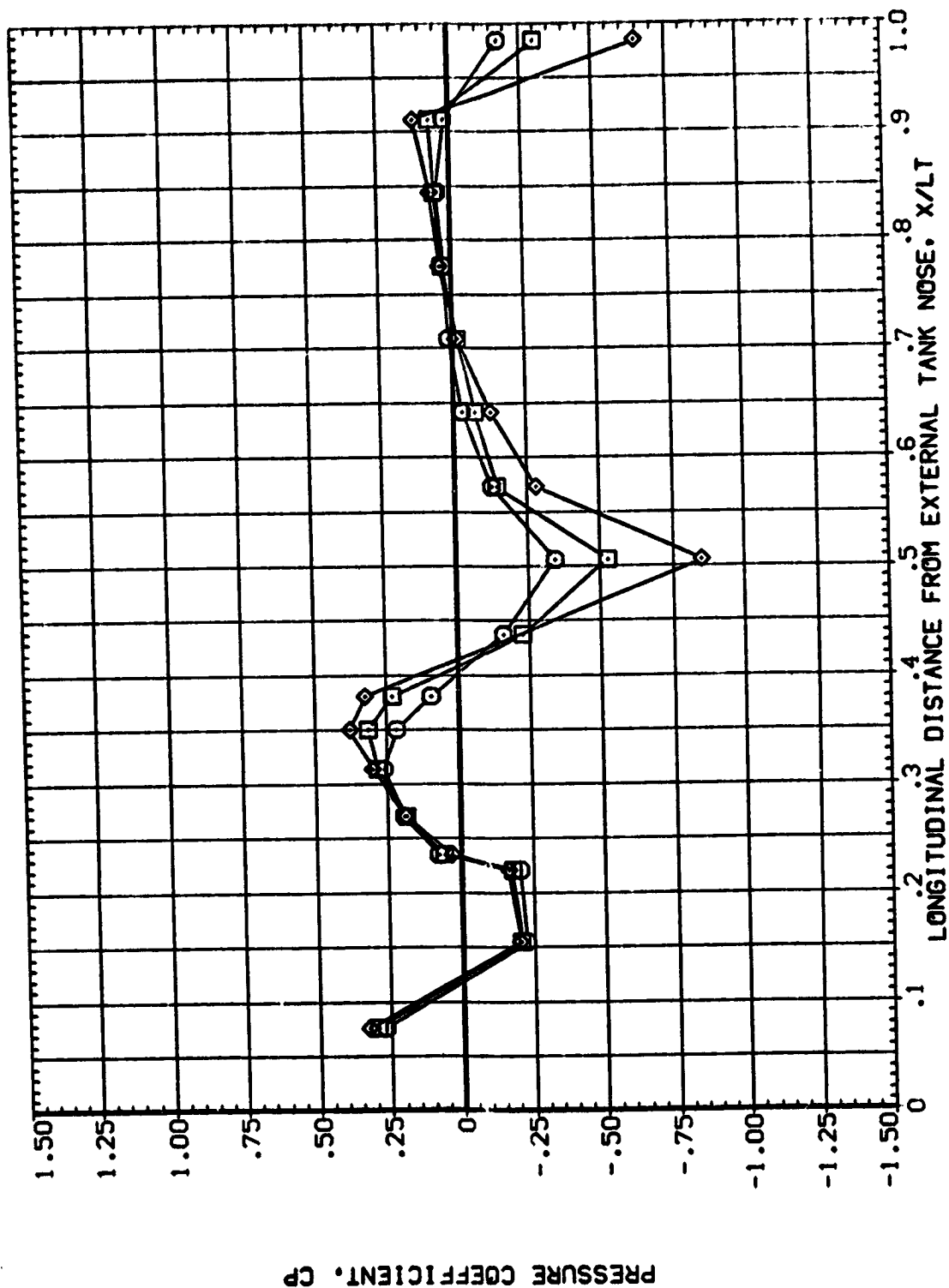
MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI .000  
 18.000  
 36.000

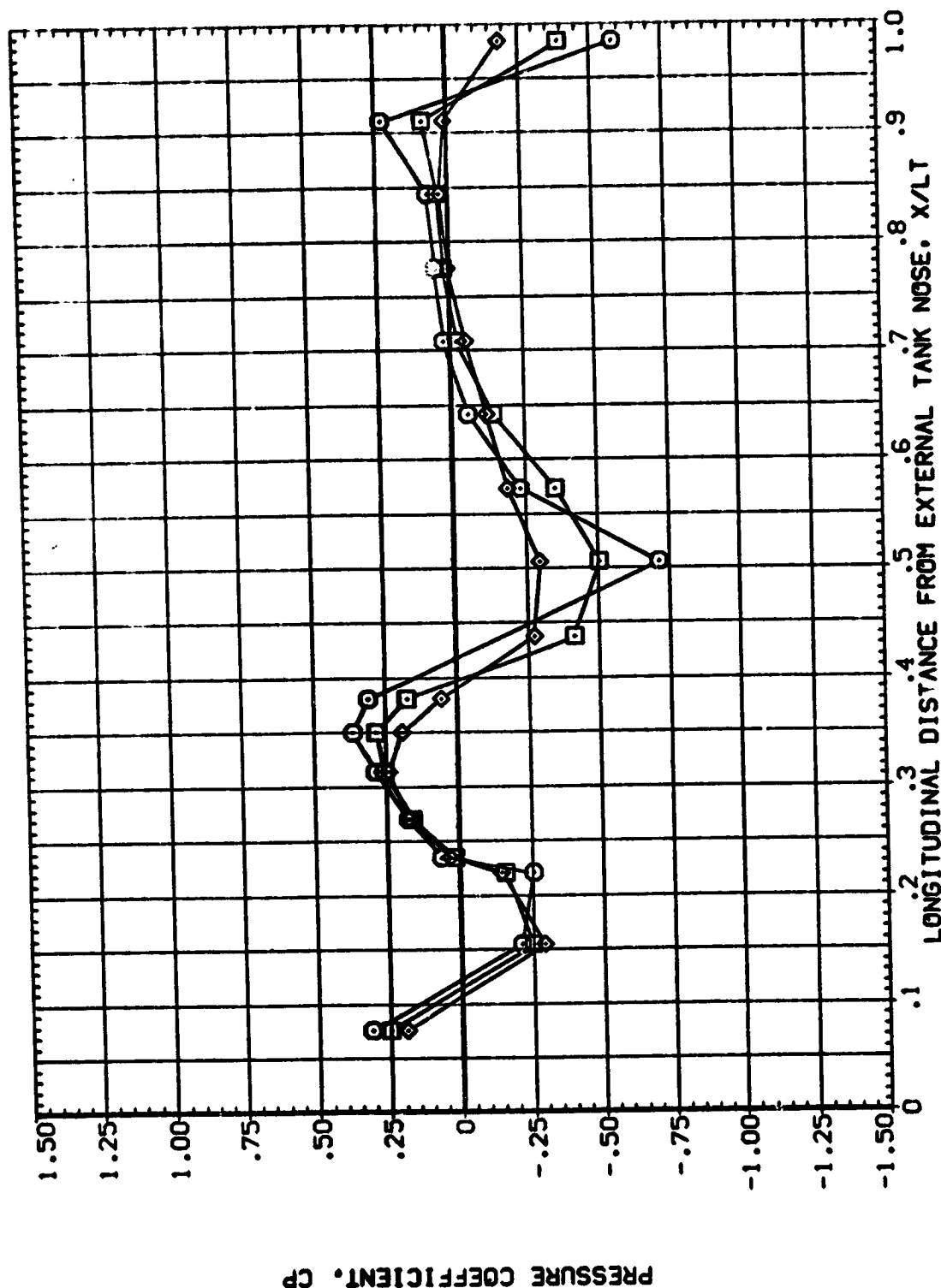
BETA 4.000  
 MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 Y-SRB

PARAMETRIC VALUES  
 -5.000 CONF 16 90.000  
 .140 RLODER .000  
 .000 CRBINC .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ◇  
 □  
 ○

PHI  
 54.000  
 72.000  
 90.000

BETA  
 4.000  
 .900

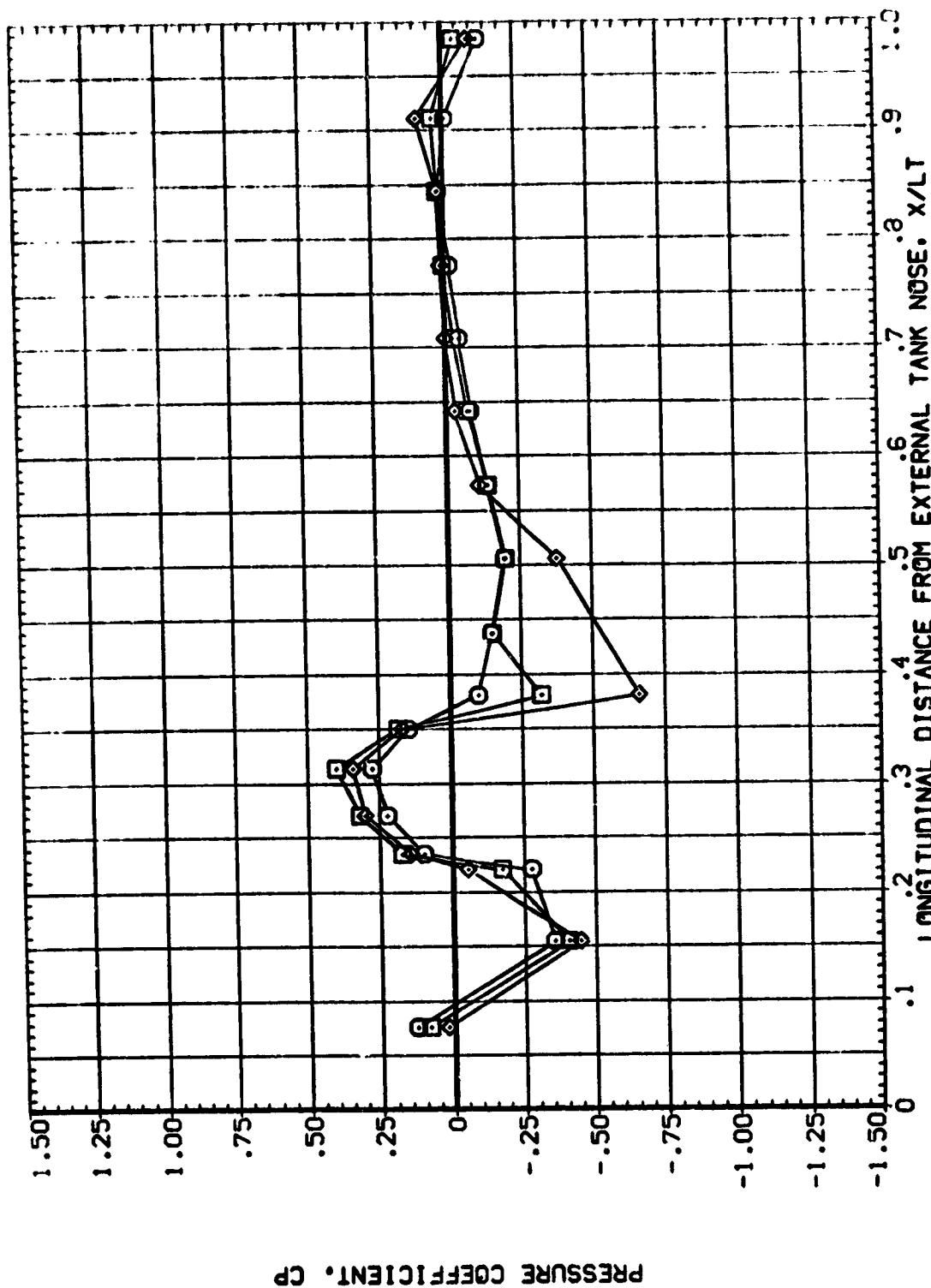
MACH

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 XMRP 5.313  
 YMRP 2.549  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.  
 IN.

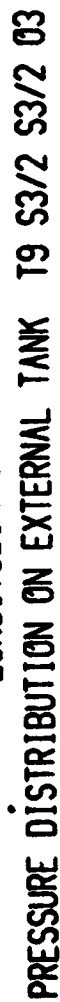
ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000  
 .000  
 .500



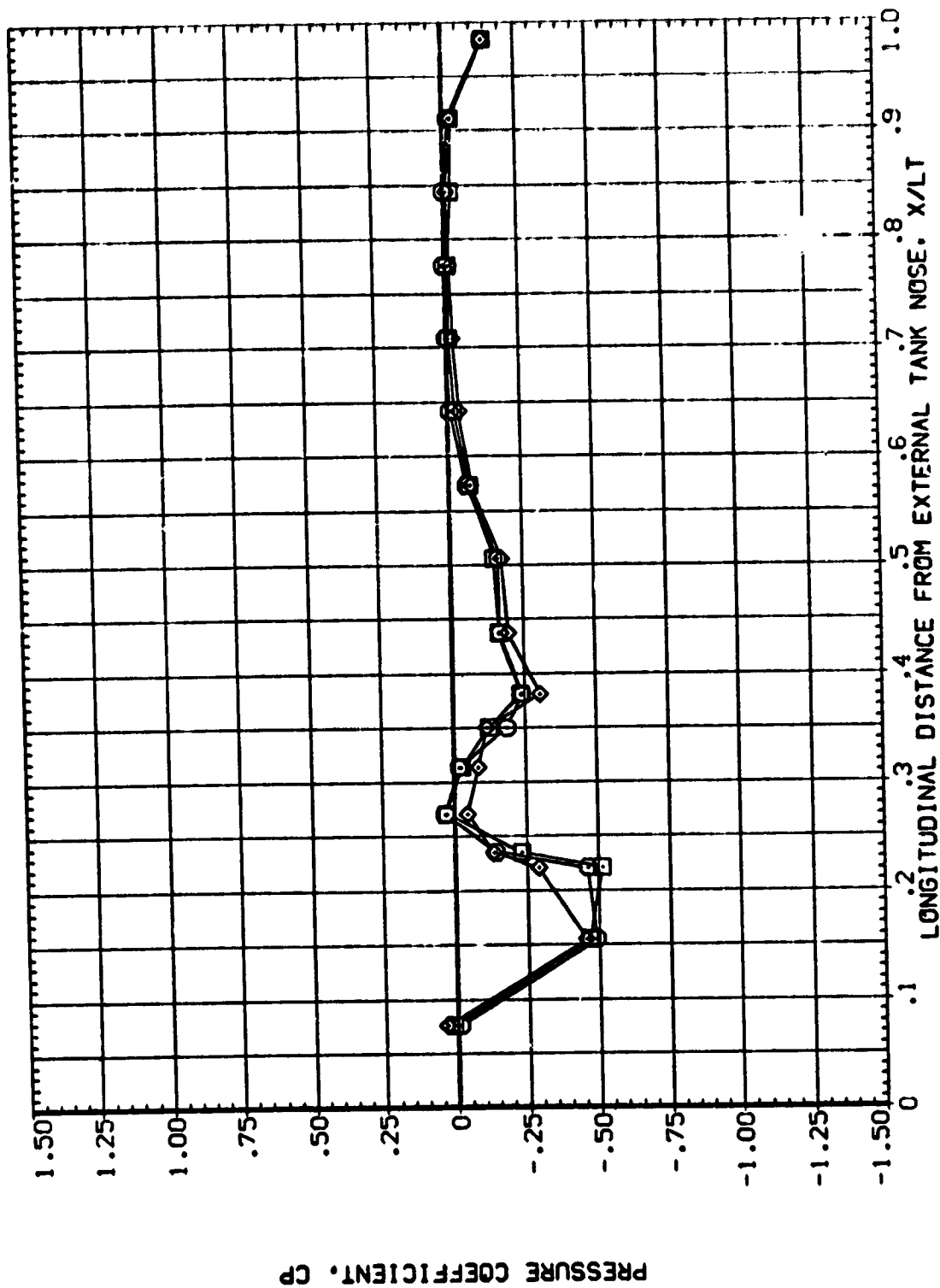
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

PARAMETRIC VALUES	
-5.000	CONF IG
.140	RUDER
.000	DRBINC
90.000	
.000	
.500	



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	162.000	180.000	198.000	4.000	.900		SREF	50. IN.	CONF IS	90.000
□							LREF	IN.	DELTA Z	.000
◇							BREF	IN.	X-SRB	.500
							XARP	IN.		
							YARP	IN.		
							ZARP	IN.		

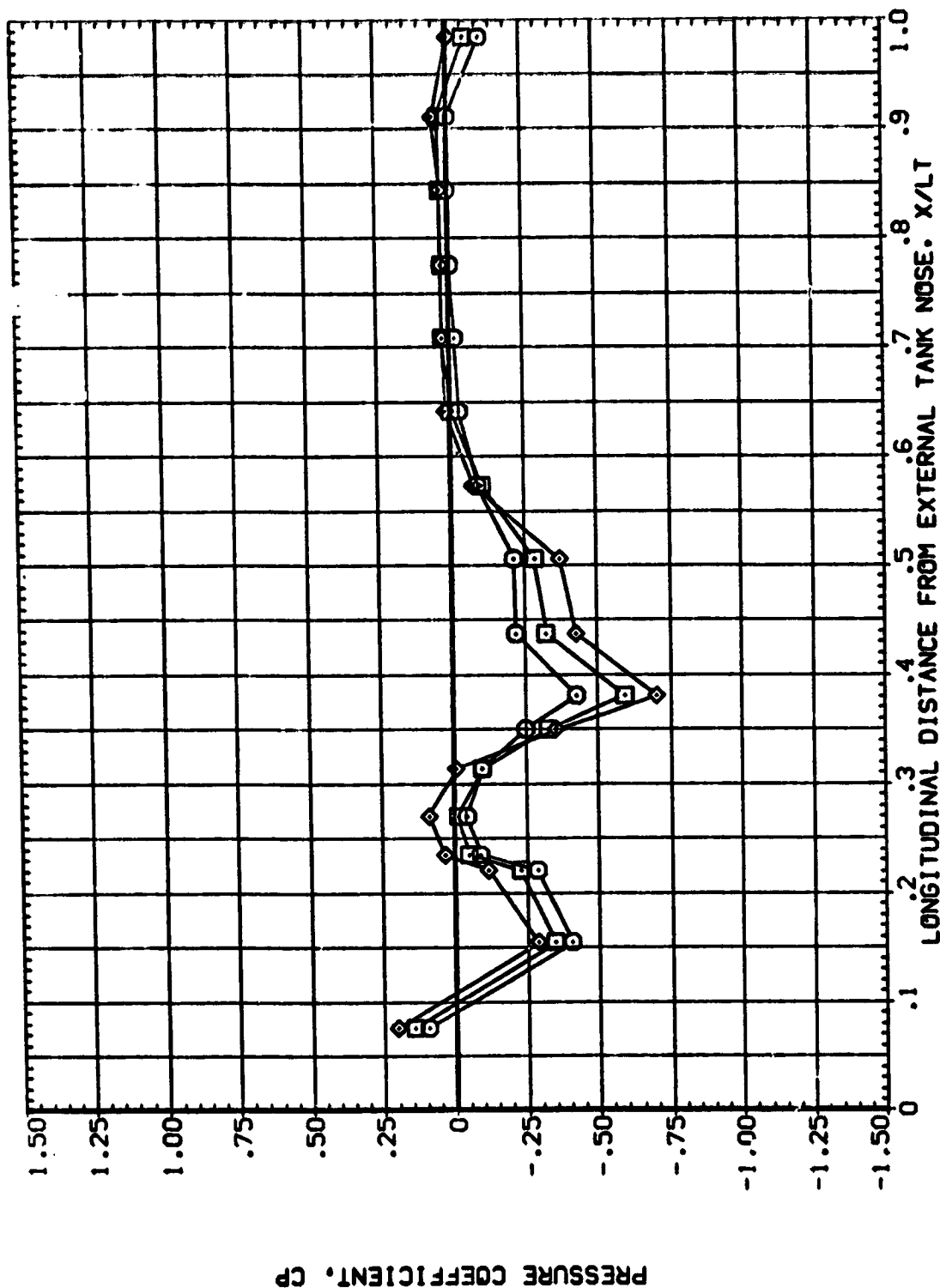


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

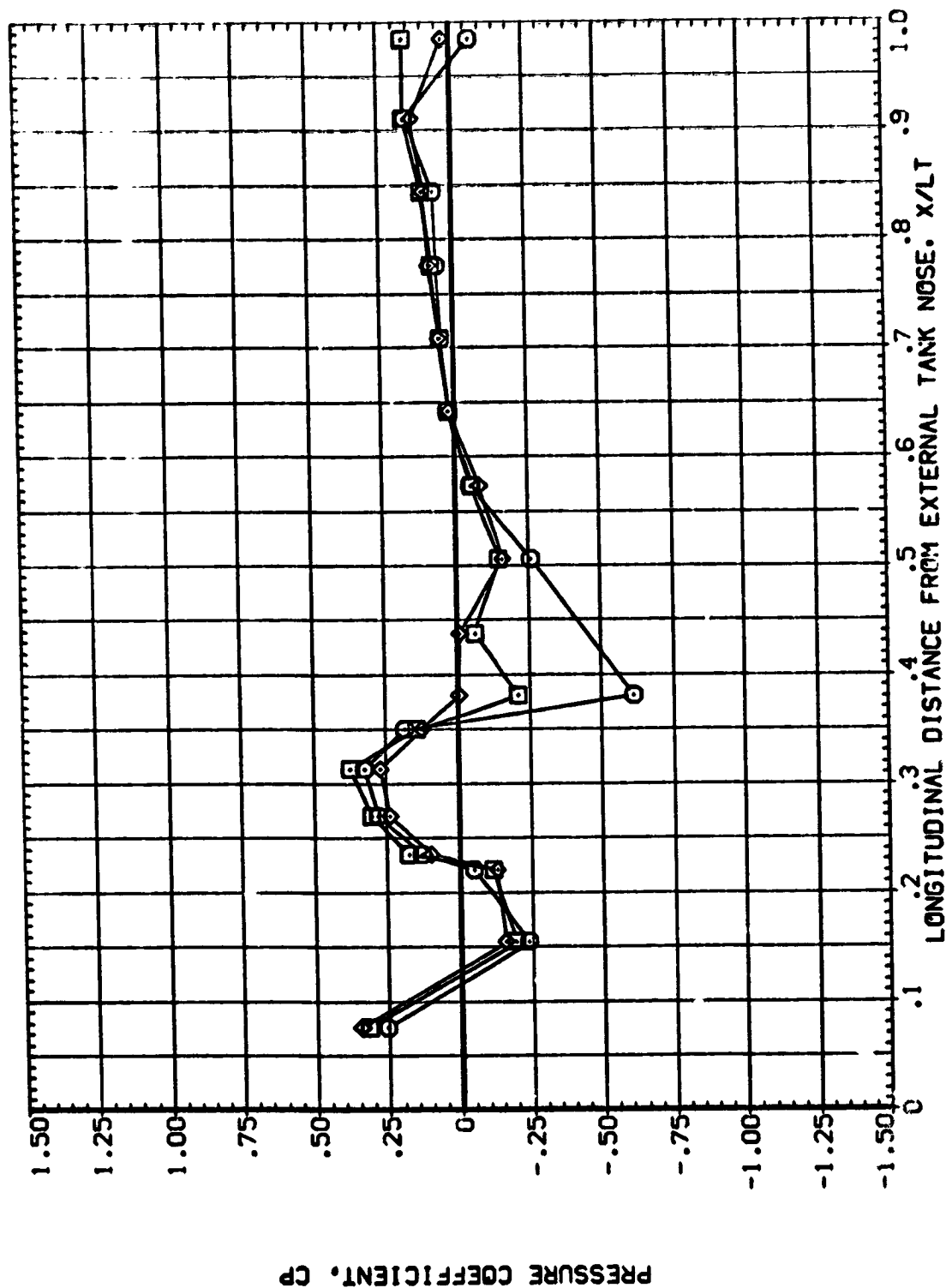
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	ALPHA	DELTA Z	SD, IN.
○	216.000	4.000	.900	5.198	5.313	5.313	2.549	IN.	-5.000	.140	IN.
□	234.000							IN.	X-SRB	0.000	IN.
◇	252.000							IN.			IN.



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) 19 S3/2 S3/2 03 EXTERNAL TANK(A82104)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	50. IN.	ALPHA	CONF IG	50.000
○	270.000	4.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	QDIER	.000
□	288.000			.000	.000	.000	.000	IN.	X-SRB	SRB IN	.500
◇	306.000							IN.			

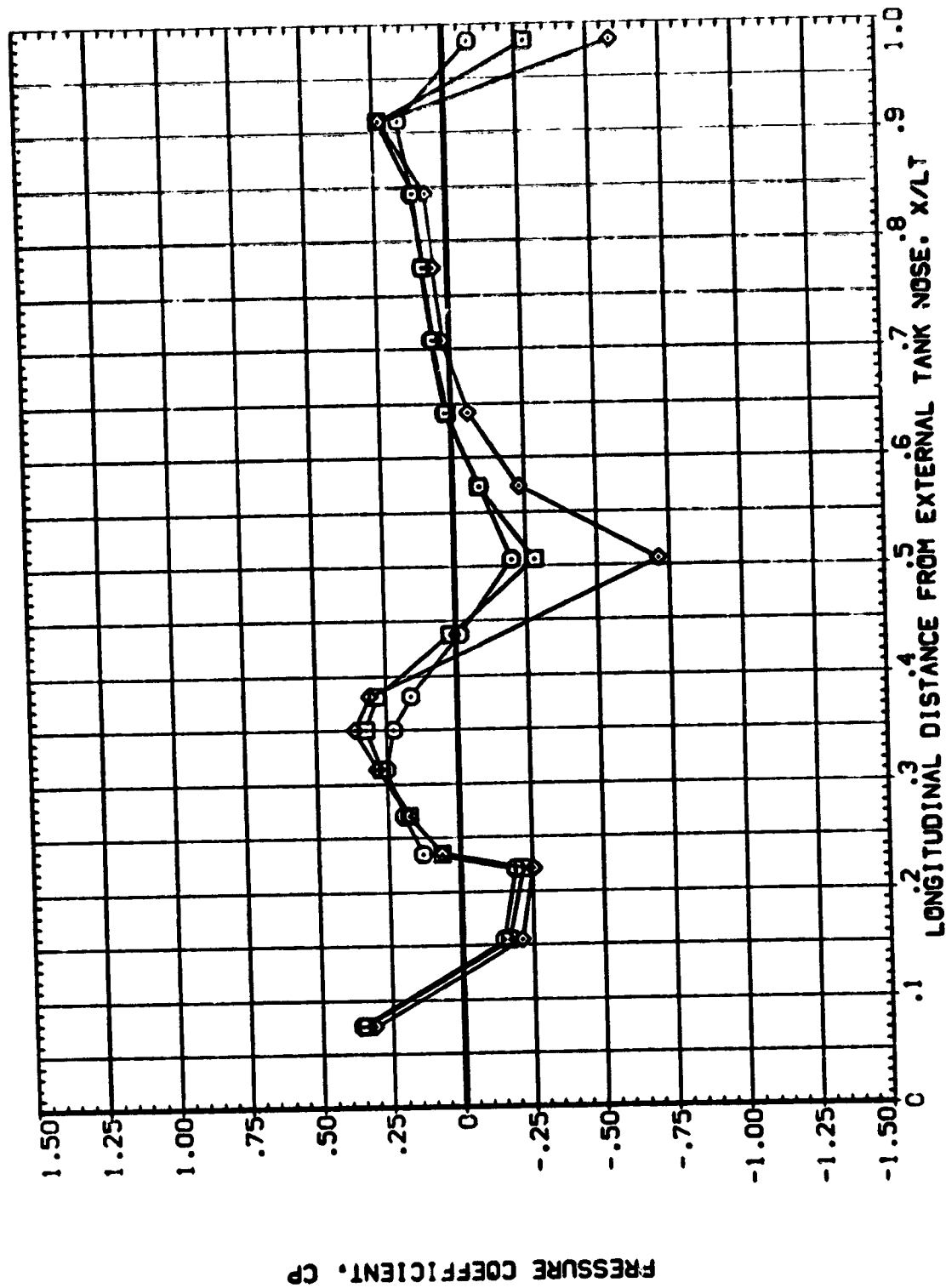


PRESSURE DISTRIBUTION ON EXTERNAL TANK 19 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82104)

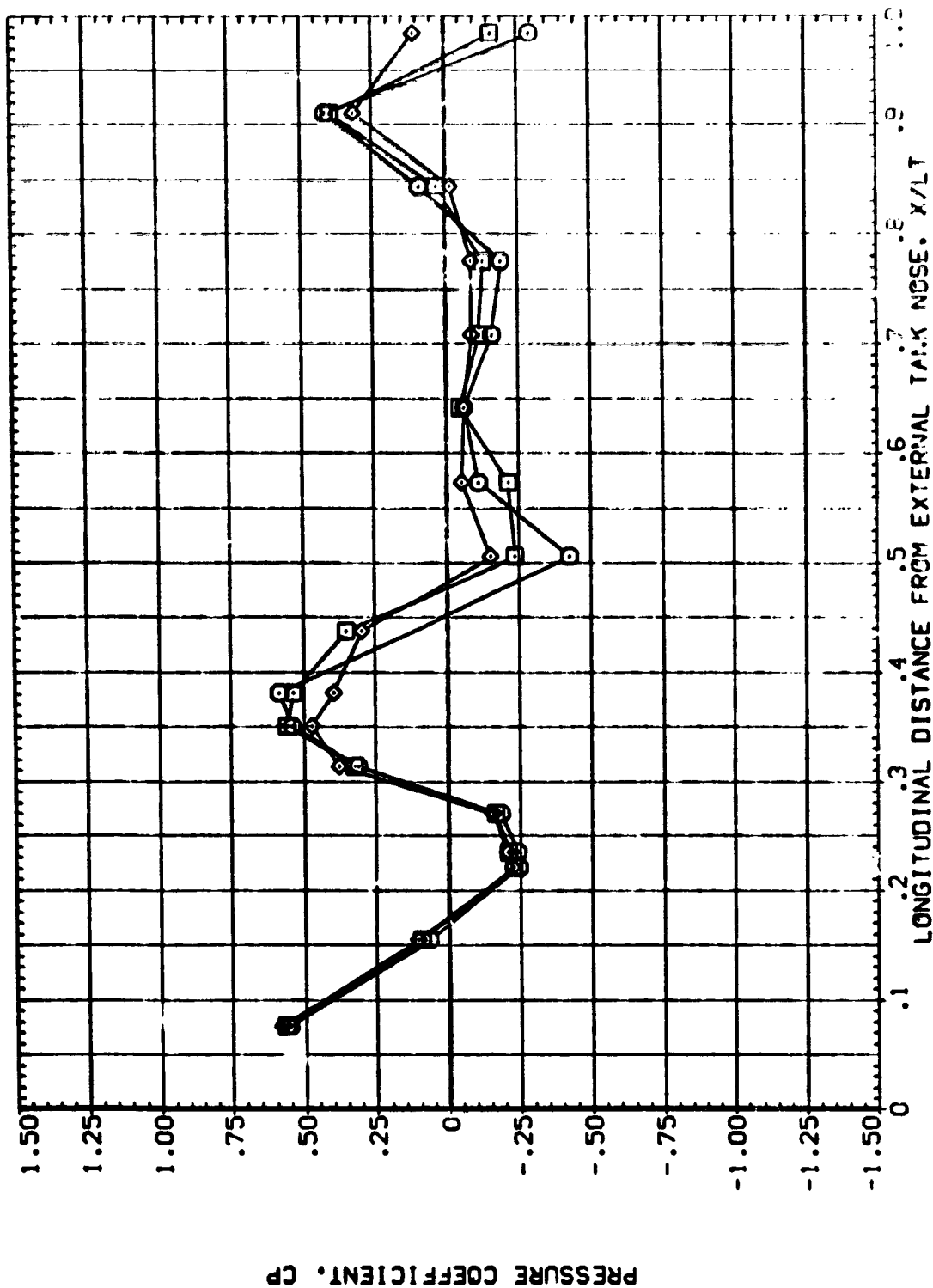
SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	324.000	342.000	4.000	.500	SRF	LREF	BREF	XRPP	YRPP	ZRPP	ALPHA	DELTAZ
□	324.000	342.000	4.000	.500	8.199	5.313	5.313	2.549	.000	.000	-5.000	CDP1G
◇	324.000	342.000	4.000	.500	8.199	5.313	5.313	2.549	.000	.000	.140	RLODR
◇	324.000	342.000	4.000	.500	8.199	5.313	5.313	2.549	.000	.000	.000	DRB1C



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A32104)

SYMBOL	PMI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SO. IN.	ALPHA	DELTA	50.00
◇	.000	-4.000	1.250	5.313	N.	.140	R-598	.000
□	10.000			2.549	N.	.000		.500
◇	36.000			.000	N.			
				ZMRP				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI 54.000  
 72.000  
 90.000

BETA -4.000

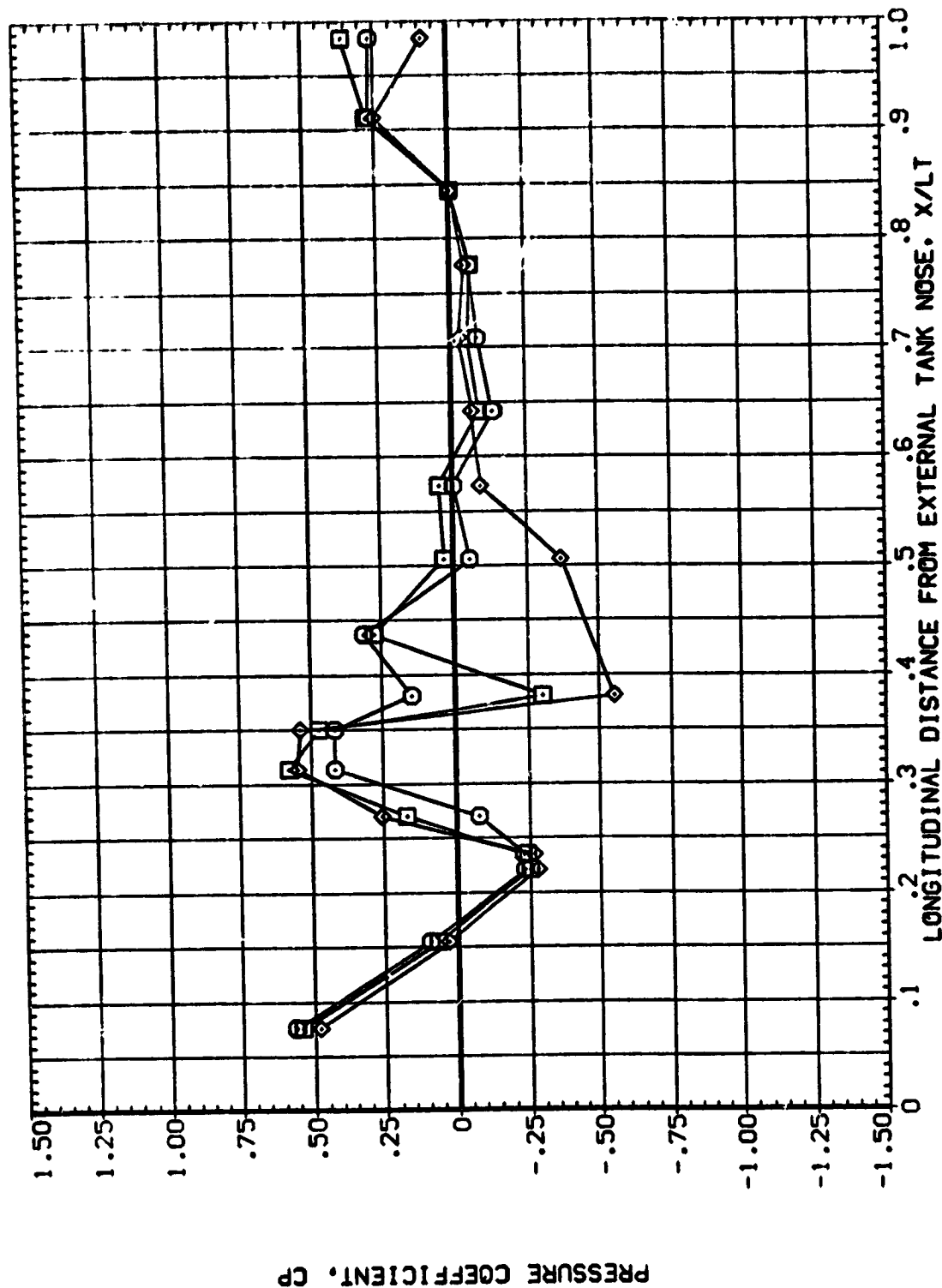
MACH 1.250

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

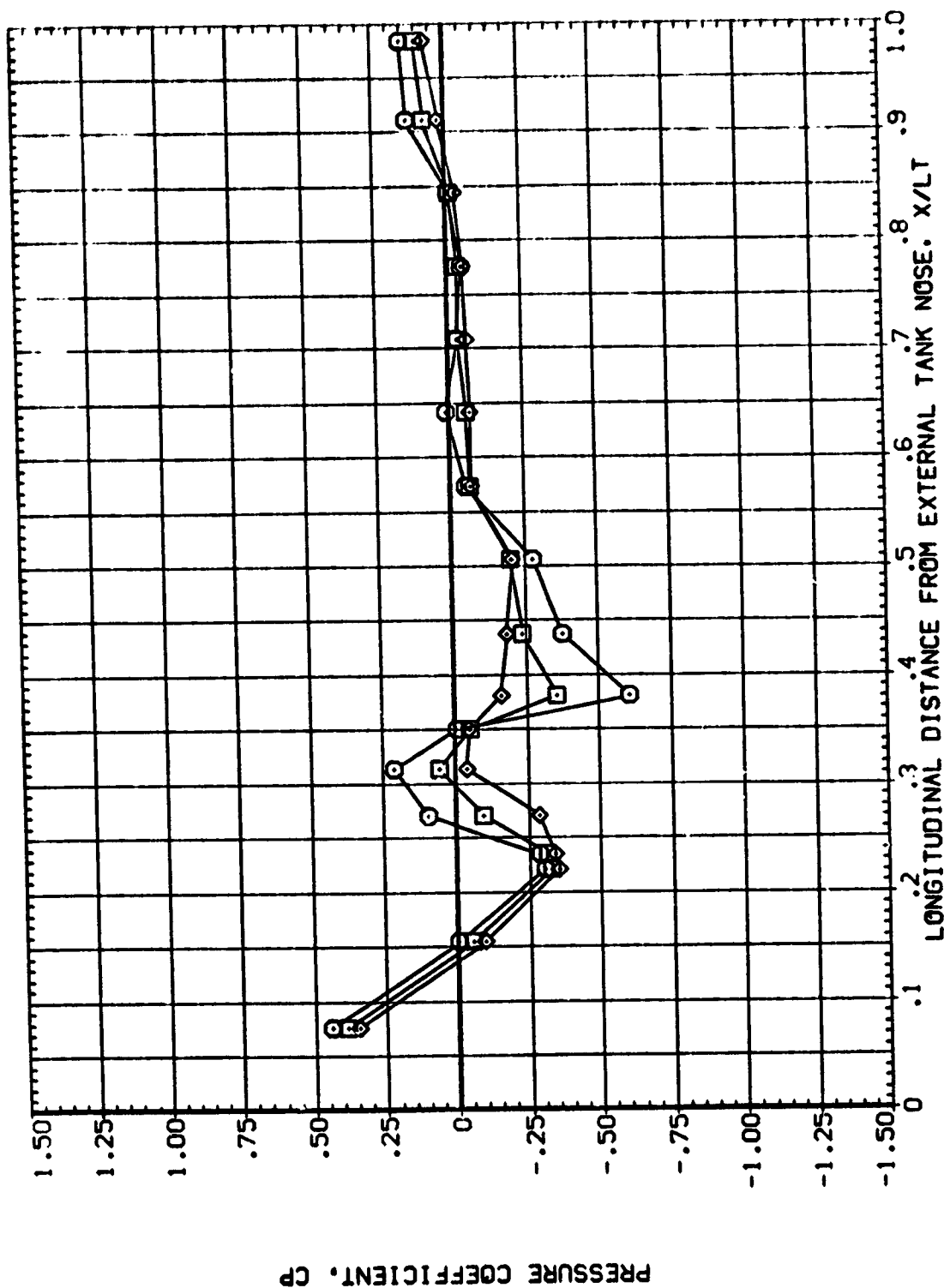
PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000			SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTAZ
○	108.000	126.000	-4.000	1.250	6.198	5.313	5.313	2.549	.000	.000	-5.000	.140
□	126.000	144.000										
◇												



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
○  
□  
◇

PHI  
162.000  
180.000  
198.000

BETA  
-4.000

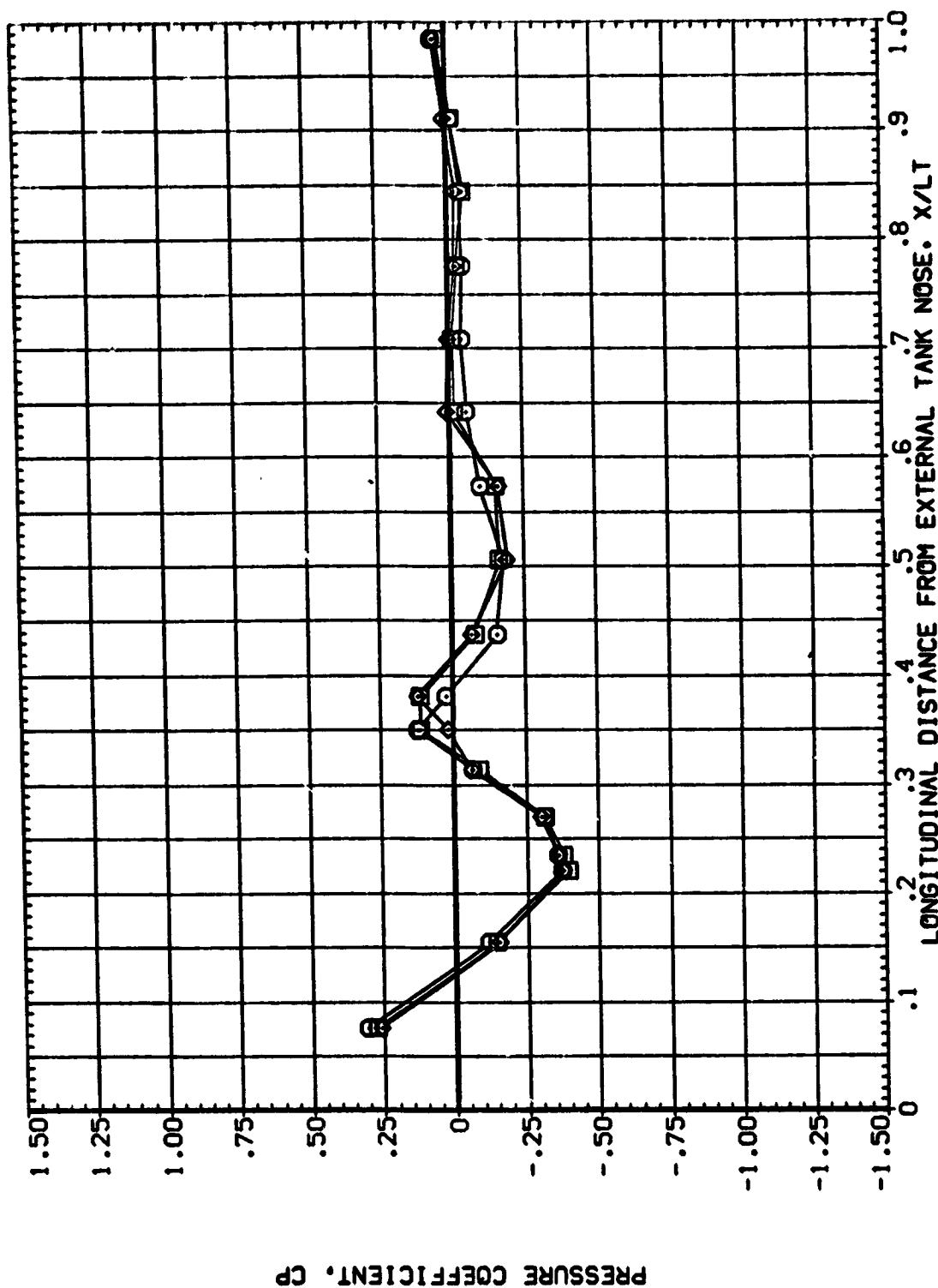
MACH  
1.250

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

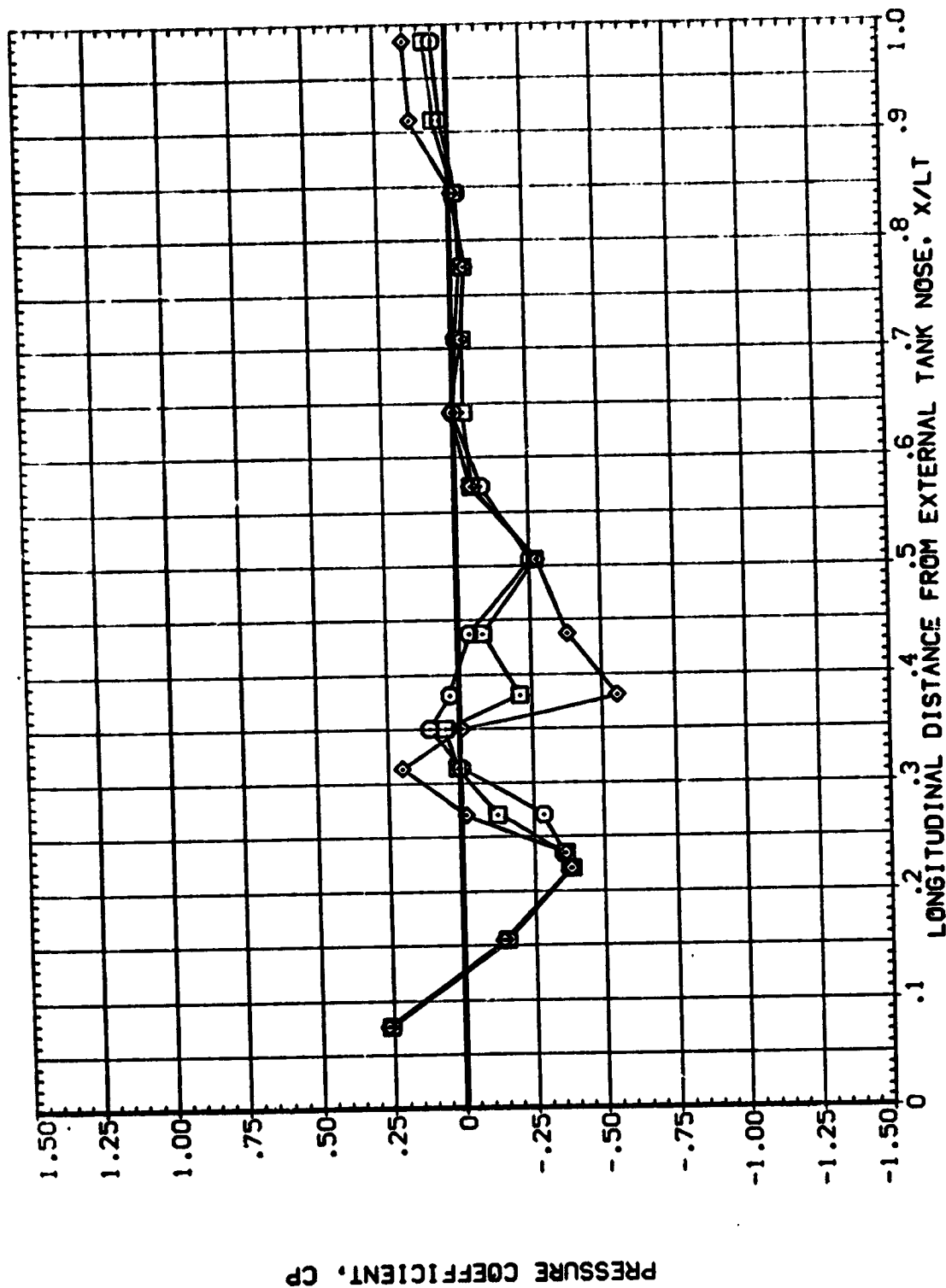
PARAMETRIC VALUES  
-5.000 CONF IG  
.140 RUDDER  
.000 QRB INC  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL		PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
◇	216.000	216.000	-4.000	1.250	SREF	6.198	50. IN.	SREF	5.313	DELTAZ	X-SRB	-5.000	CONF IG
	234.000												
	252.000												
◇					LREF	5.313	IN.	LREF	5.313			.140	RJDER
◇					BREF	2.249	IN.	BREF	2.249			.000	RR INC
◇					XMRD	.000	IN.	XMRD	.000				
◇					ZMRD	.000	IN.	ZMRD	.000				



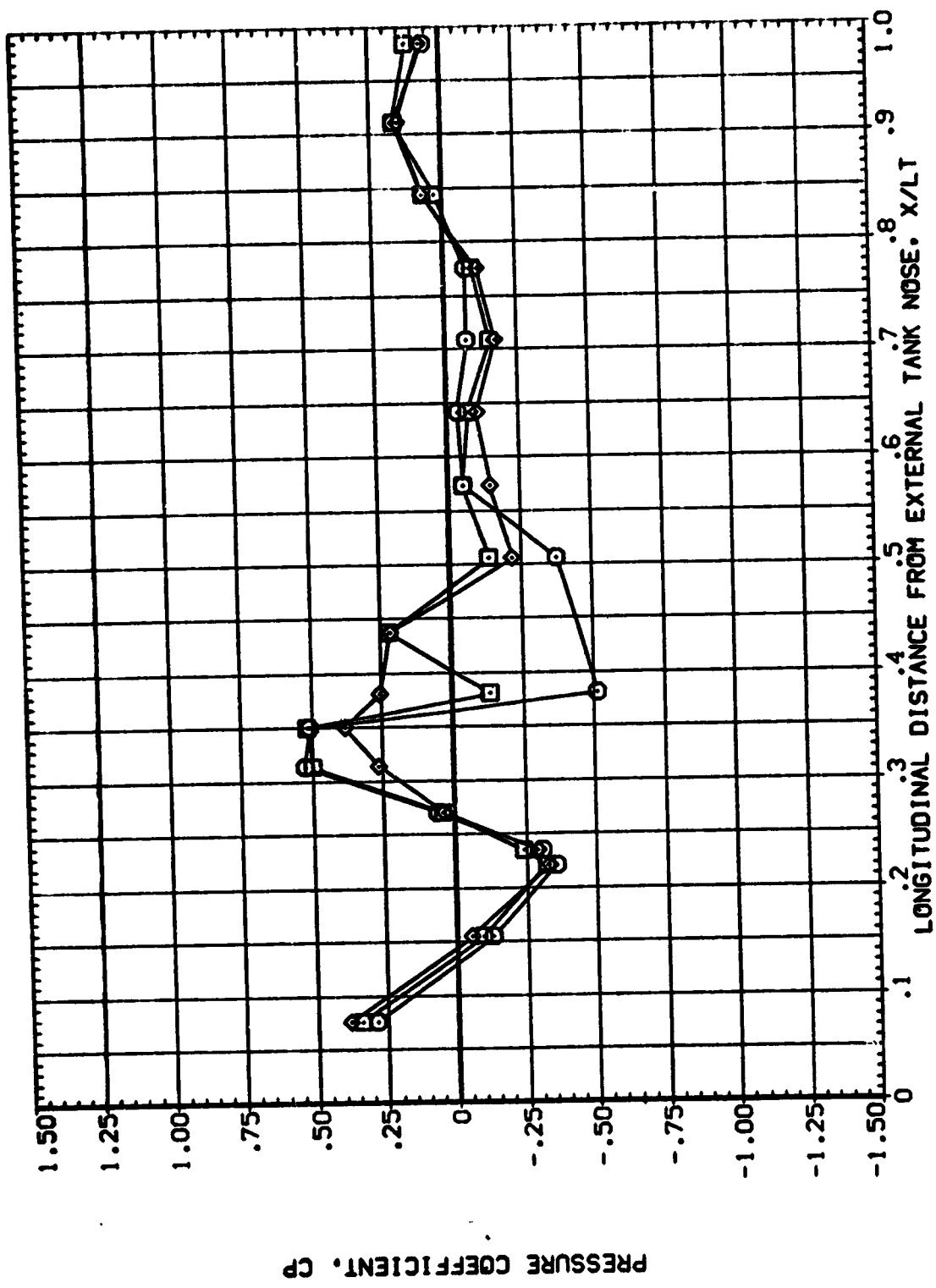
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





NSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA					PARAMETRIC VALUES				
	270.000	288.000	-4.000	1.250	SREF	LREF	BREF	XPRP	YPRP	90. IN.	ALPHA	-5.000	CONF 16	90.000
○					6.198	5.313	5.313	2.549	.000	IN.	DELTA Z.	.140	RUCDER	.000
□					2.549	2.549	2.549	2.549	.000	IN.	X-SRB	.000	DRBINC	.500
◇					.000	.000	.000	.000	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

PHI  
324.000  
342.000  
360.000

BETA  
-4.000

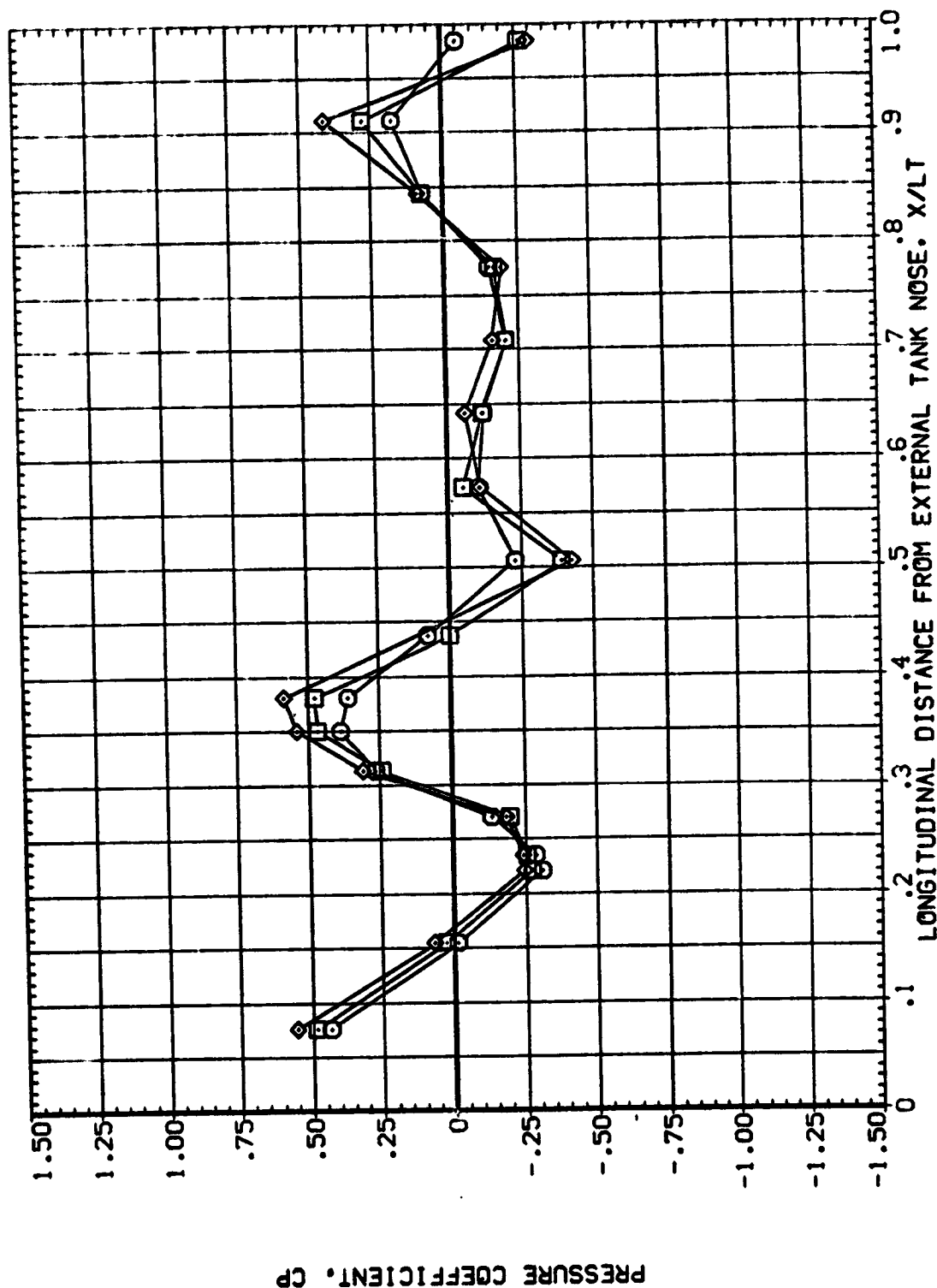
MACH  
1.250

REFERENCE DATA  
SREF 5.198  
LREF 5.313  
BREF 5.313  
XWRP 2.549  
YWRP .000  
ZWRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
-5.000 CONFIG 90.000  
.140 RUDDER .000  
.000 ORBITAL .500

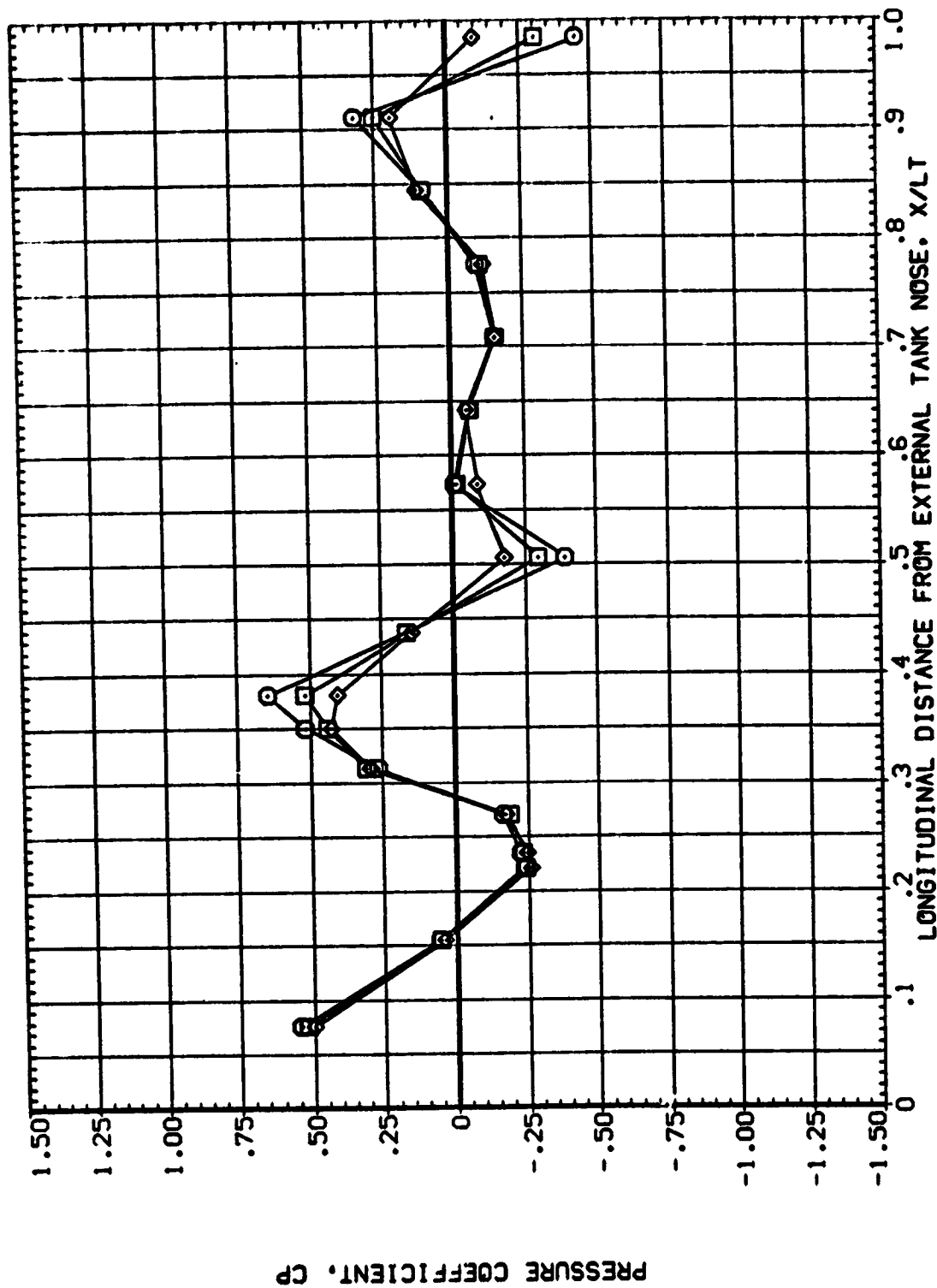


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	ALPHA	CONF IG	90, DC
○	.000	.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	18.000							IN.	X-SRB	.000	.000
◇	36.000							IN.			.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

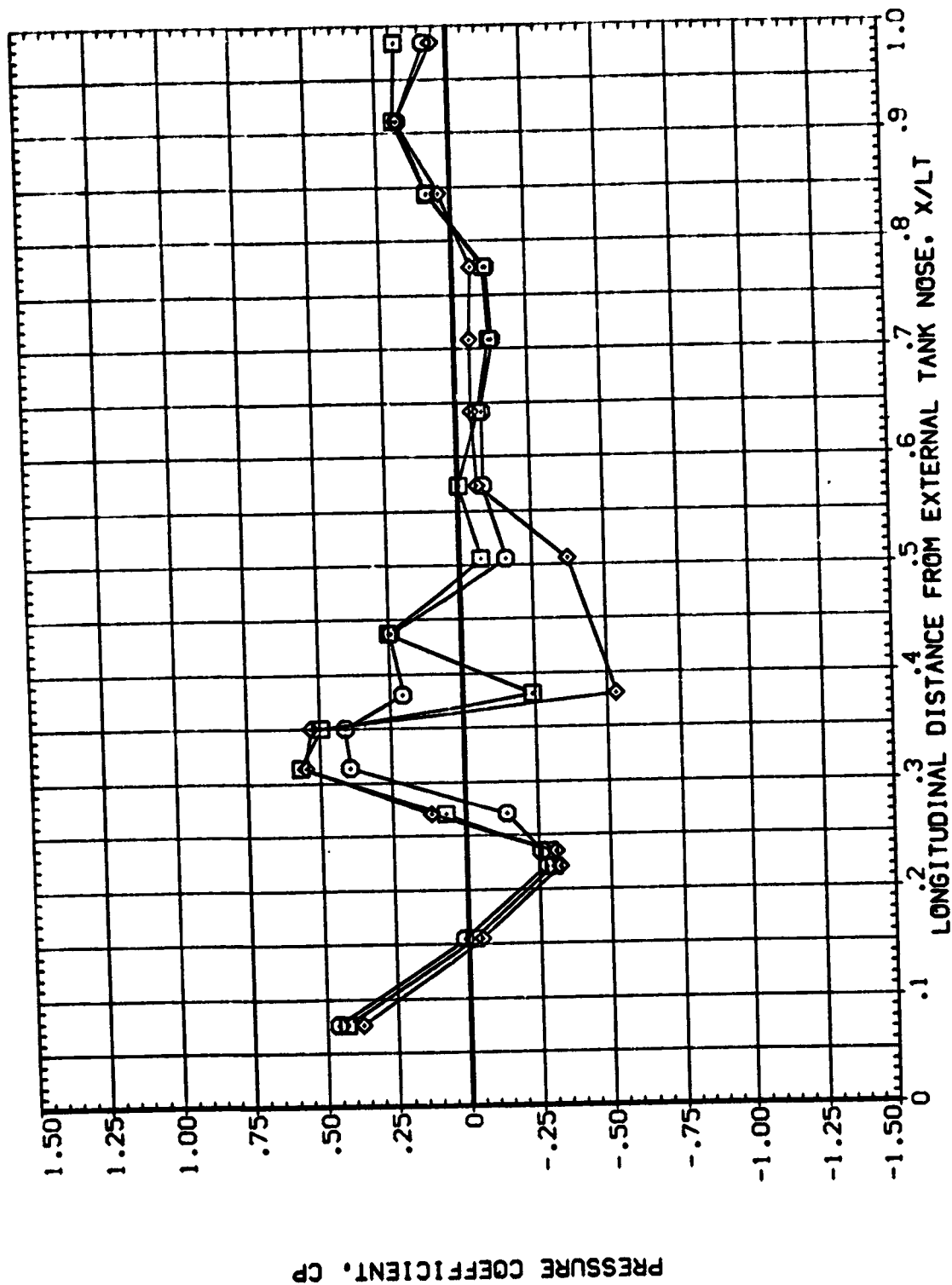
SYM  $\diamond$   $\square$   $\circ$

PHI  
54.000  
72.000  
90.000

BETA .000 MACH 1.250

REFERENCE DATA  
SREF 6.198 SQ. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

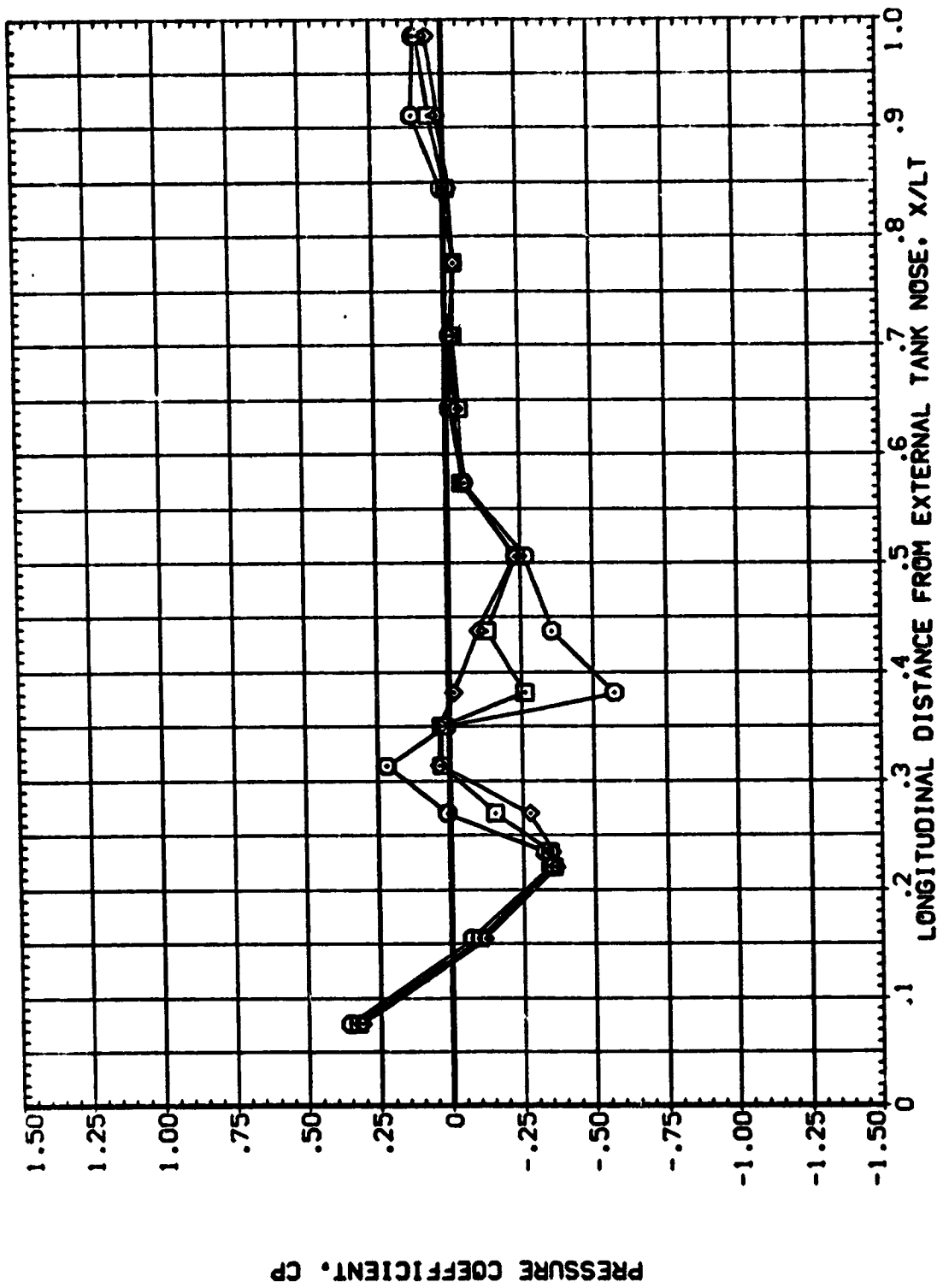
PARAMETRIC VALUES  
-5.000 CONVIG  
.140 RUDDER  
.000 DRBINC  
90.000  
0.000  
500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

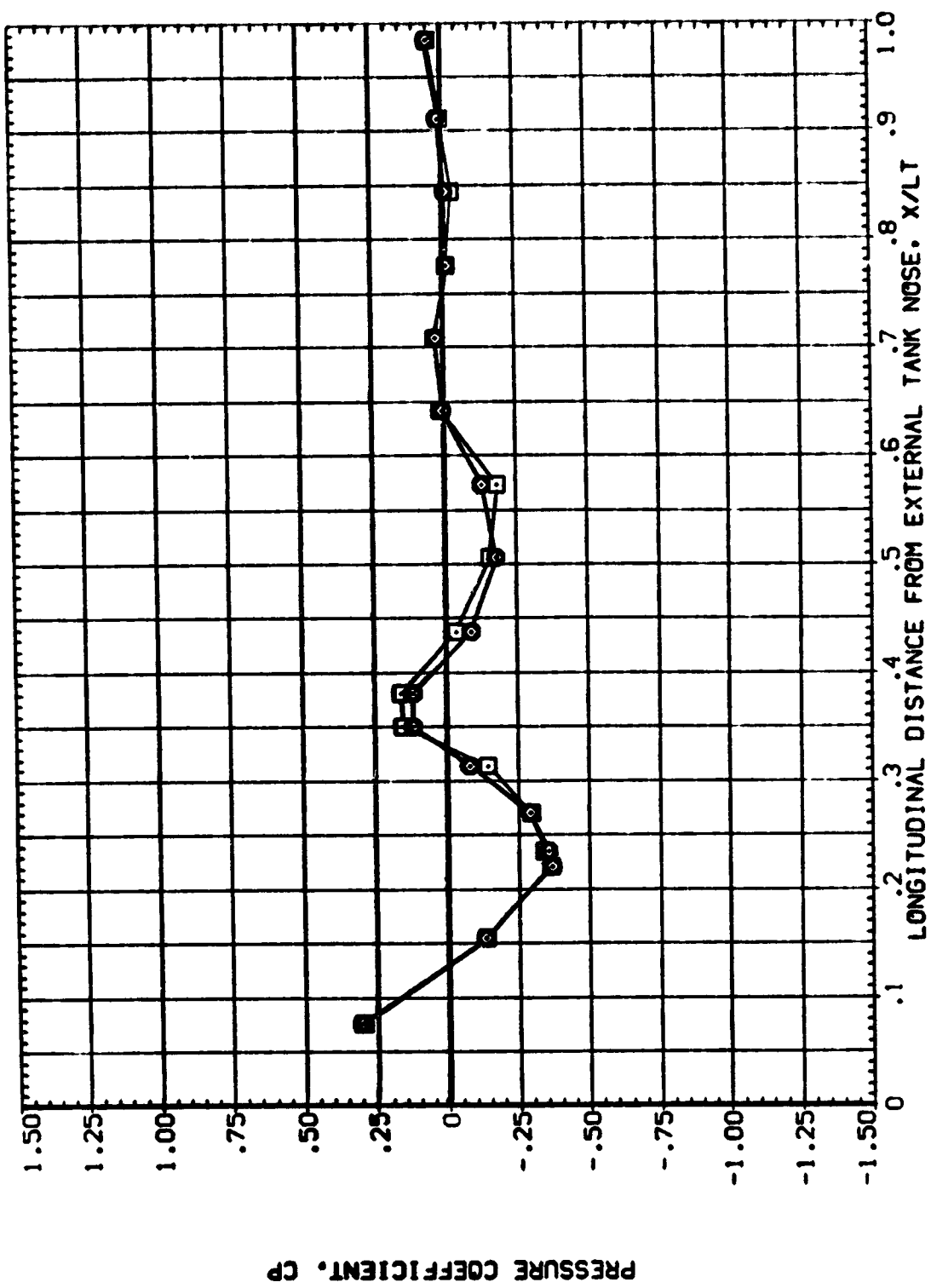
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	
○	108.000	.000	1.250	6.198	5.313	5.313	2.549	IN.	X-598	.140	RUDER
□	126.000							IN.		.000	ORBIT
◇	144.000							IN.		.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

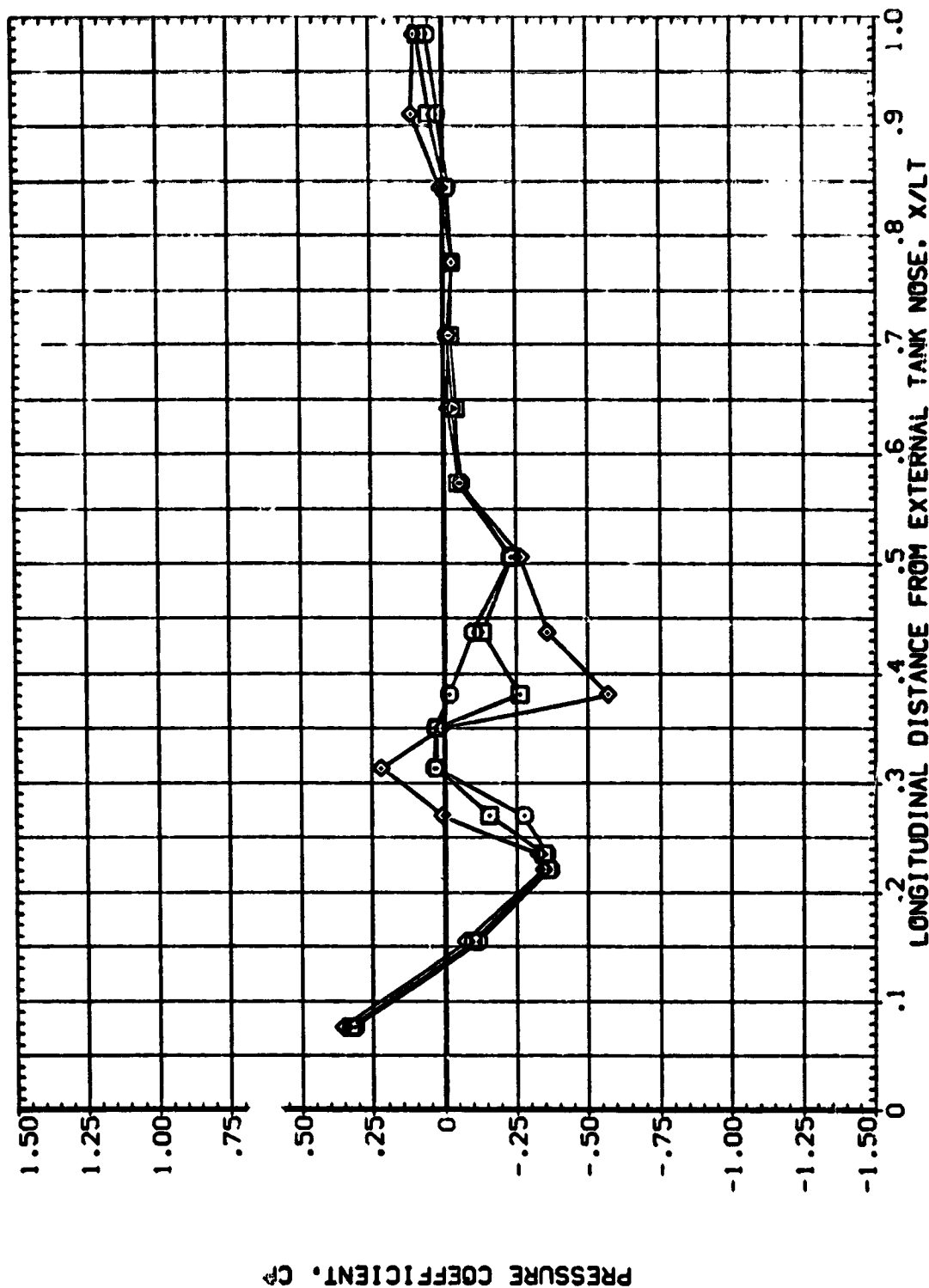
SYMBOL		PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
○	162.000				.000		1.250	SREF	6.198	50. IN.	-5.000	CONF IG	90.000
□	180.000							LREF	5.313	IN.	.140	RUDDER	.000
◇	198.000							BREF	5.313	IN.	.000	DRBINC	.500
								XMRP	2.549	IN.			
								YMRP	.000	IN.			
								ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82TC4)

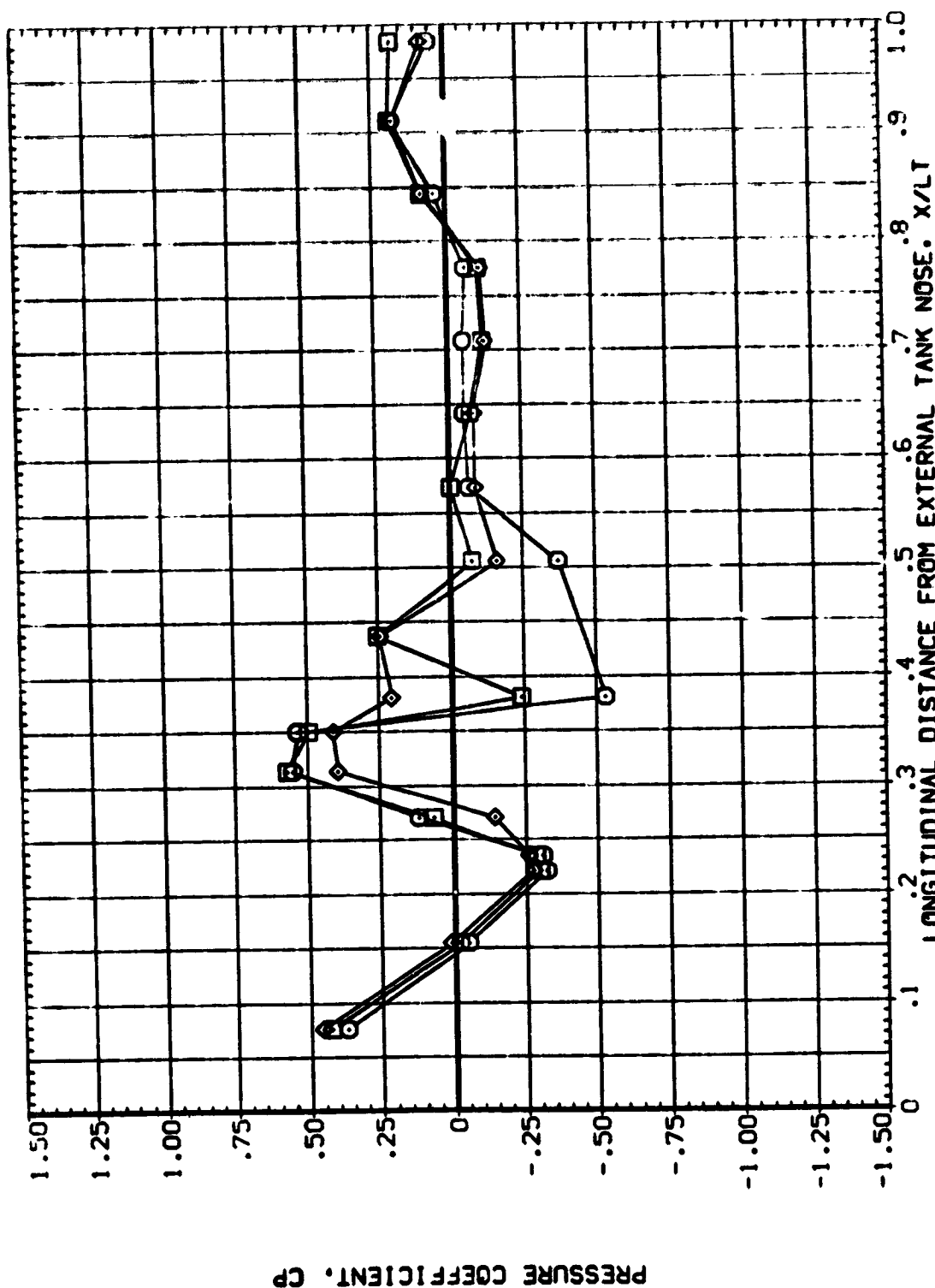
SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	216.000	.000	1.250	SREF 6.198	-5.000
□	234.000			LREF 5.313	.14C
◇	252.000			BREF 5.313	.003
				YARP 2.549	.09INE
				ZARP .000	
					90.000
					.000
					.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	50. IN.	A-3-A	50.000
□	270.000	.000	1.250	LREF	5.313 IN.	TE-TA2	-5.000
◇	288.000			BREF	5.313 IN.	1-508	.140
	306.000			XPRP	2.549 IN.		.000
				YPRP	.000 IN.		.000
				ZPRP	.000 IN.		.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 □  
 ◇

PMI 324.000  
 342.000  
 360.000

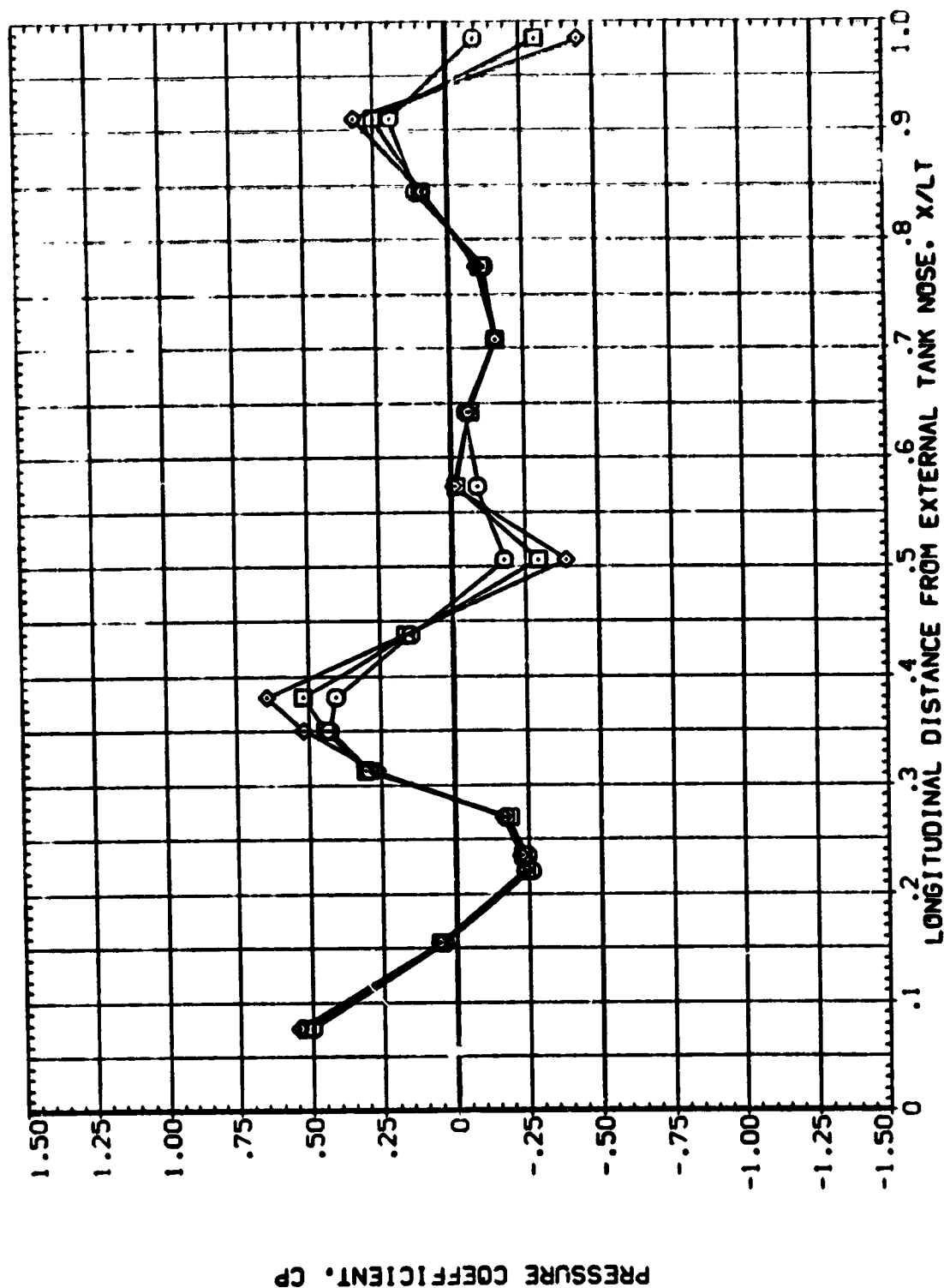
BETA .000  
 MACH 1.250

REFERENCE DATA  
 SREF 6.199  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SOB

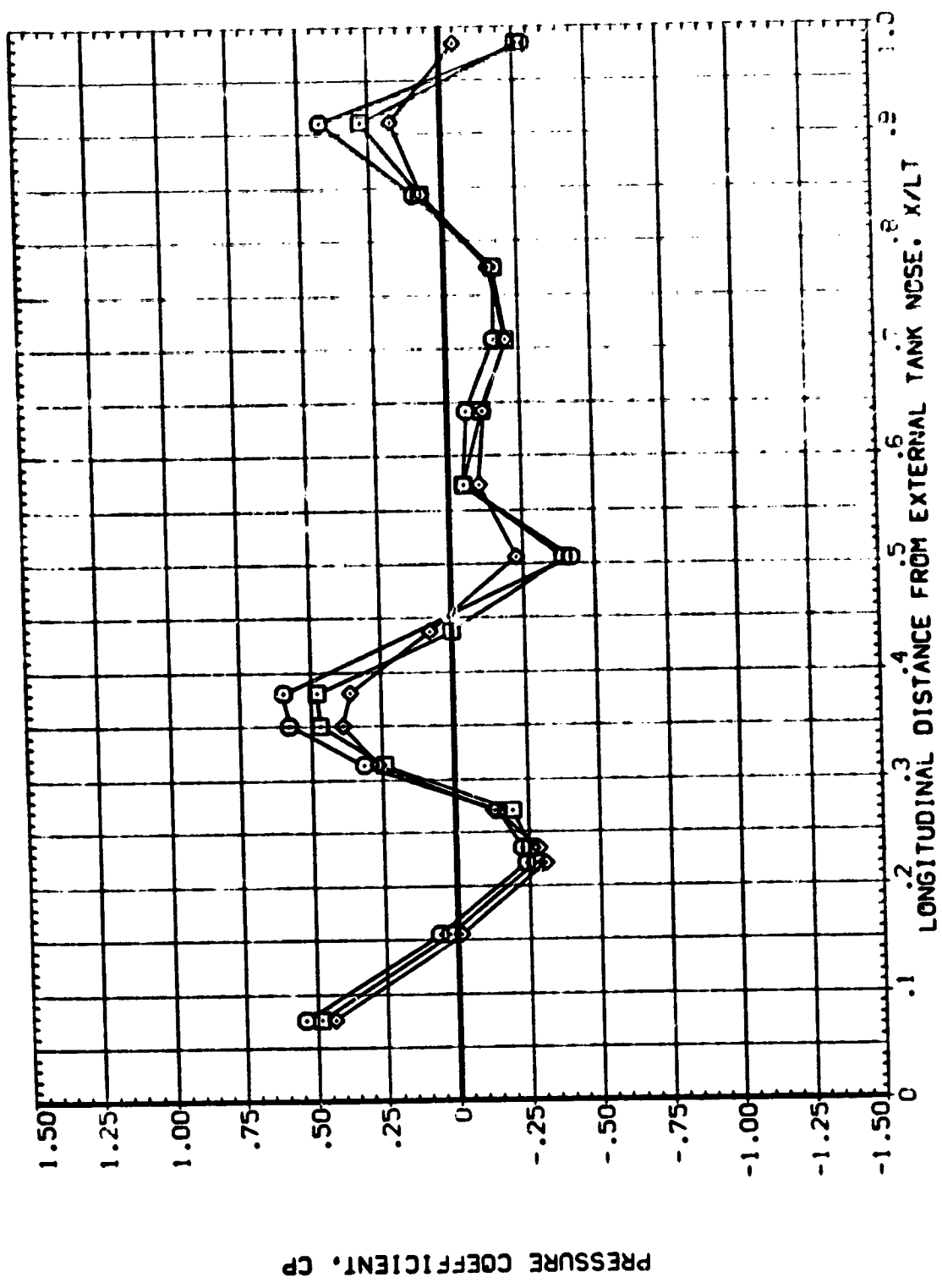
PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82124)

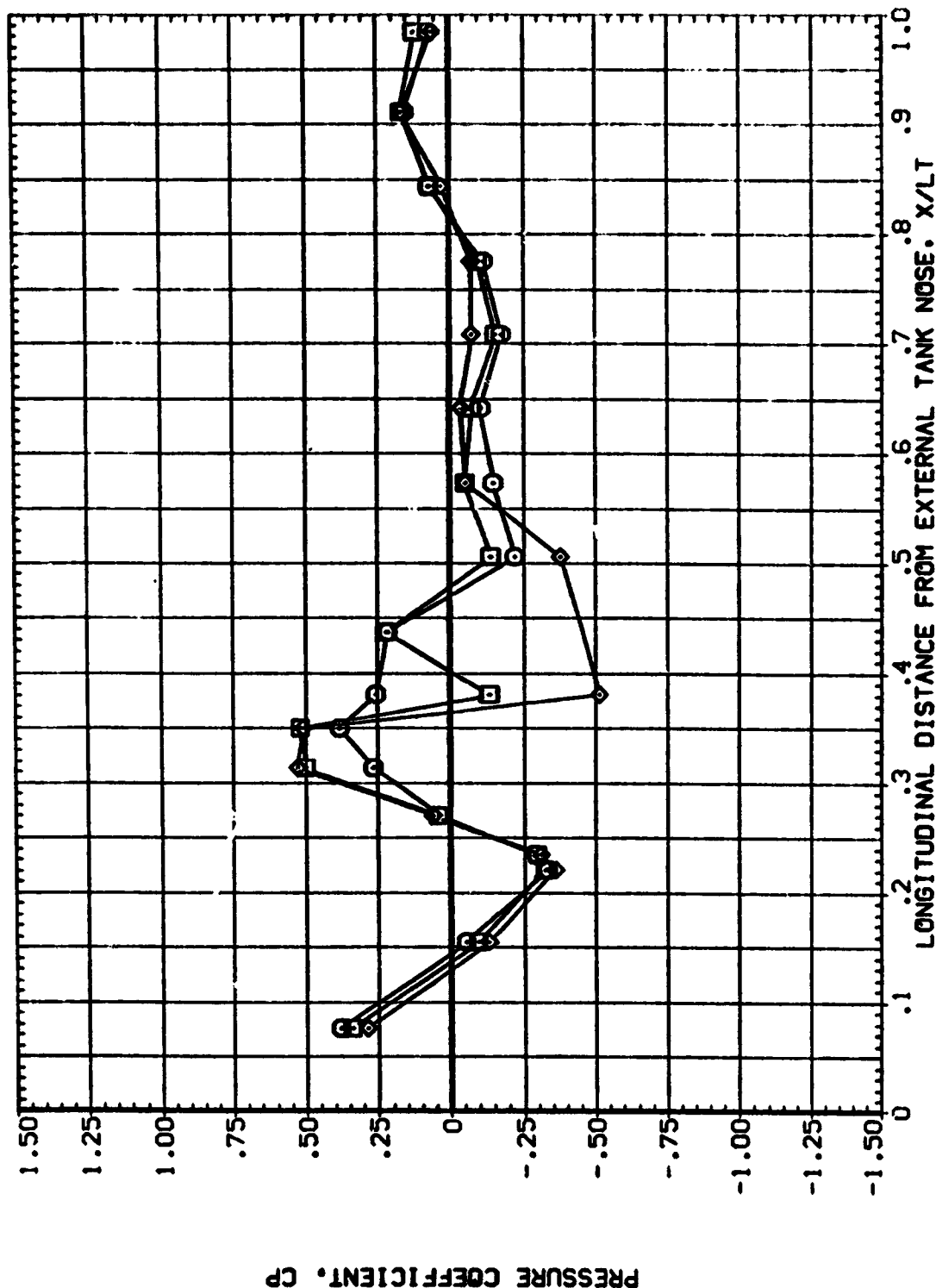
PHI	BETA	MACH	REFERENCE DATA	ALPHA	PARAMETRIC VALUES
.000	4.000	1.250	SAFE 6.198	DELTA2	SCALING 90.000
18.000			REF 5.313		COMPIC 200
36.000			REF 5.313		RECEP 100
			REF 5.313		ORGINC 100



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SG IN.	ALPHA DELTA Z	CONF IS	90.000
□	54.000	4.000	1.250	6.198	5.313	5.313	2.549	IN.	X-SRB	.140	.000
◇	72.000							IN.		.000	.000
	90.000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
○  
□  
◇

PHI 108.000  
126.000  
144.000

BETA 4.000

MACH 1.250

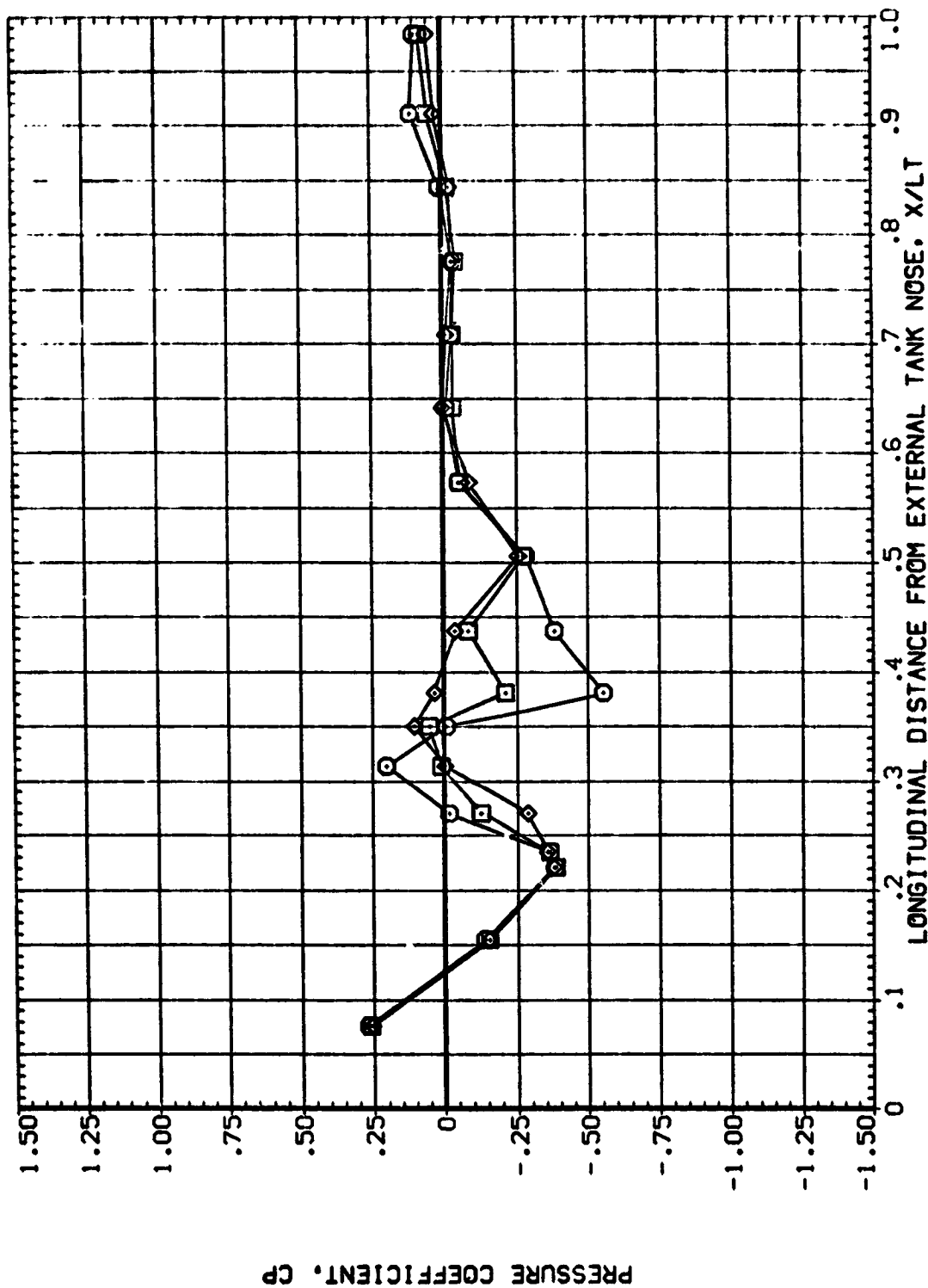
REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SD. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
-5.000  
.140  
.000  
0.000  
0.000

90.000  
0.000  
0.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 162.000  
 180.000  
 198.000

BETA  
 4.000

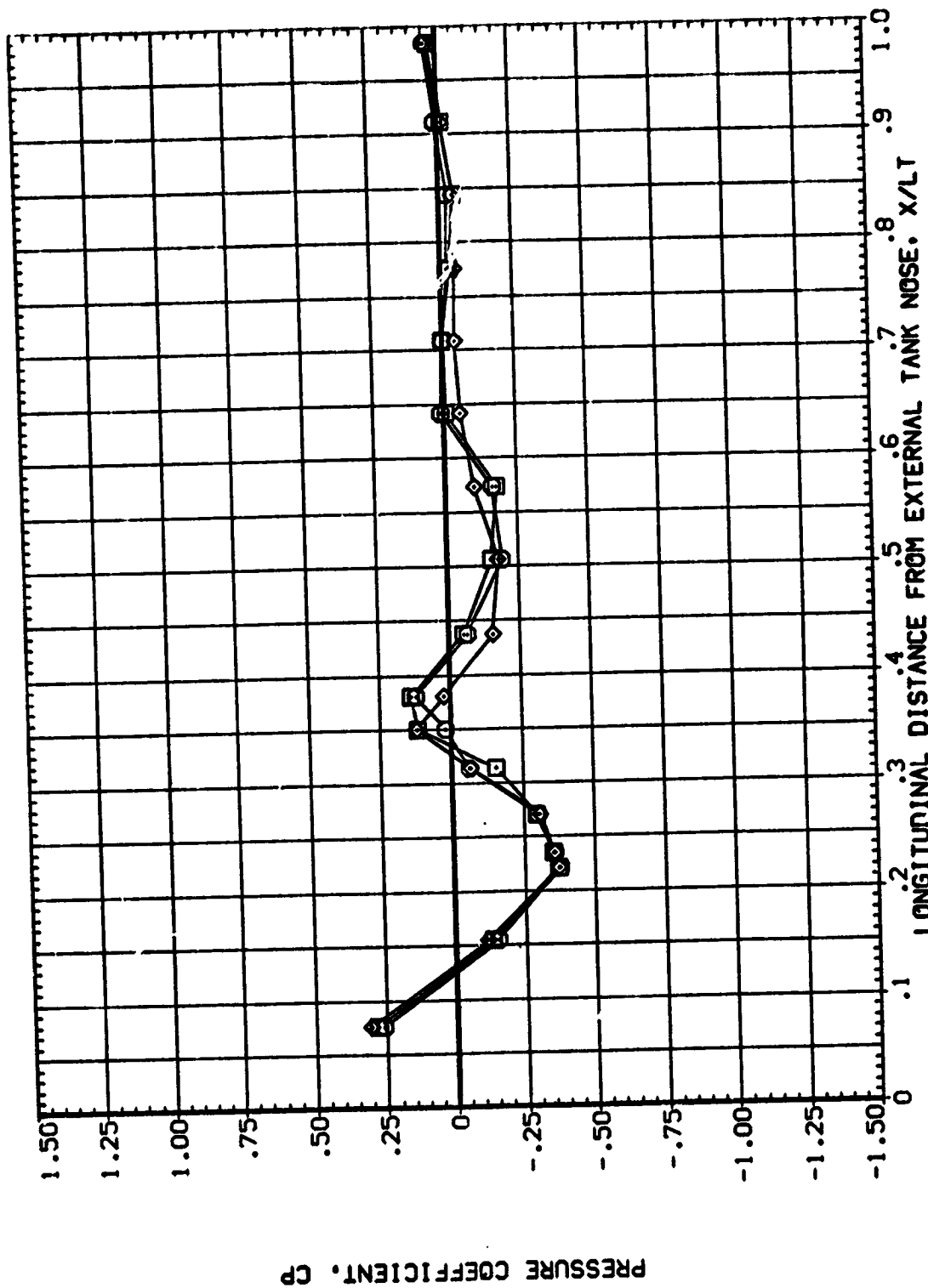
MACH  
 1.250

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
○  
□  
◇

PHI  
216.000  
234.000  
252.000

BETA  
4.000

MACH  
1.250

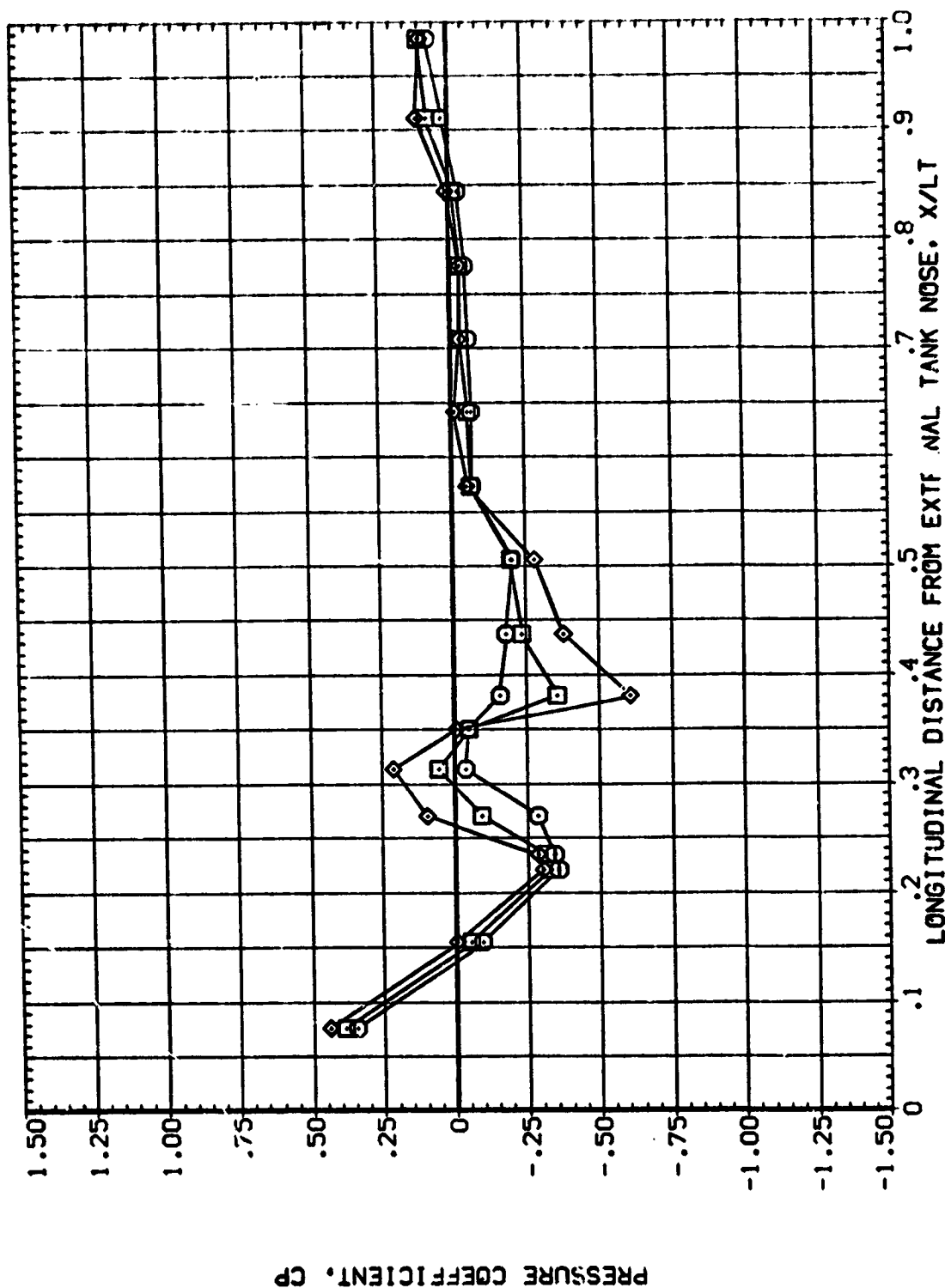
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SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
-5.000  
.140  
.000

CONF IG  
RUDDER  
ORBITING



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(I:A32F) T9 S3/2 S3/2 03

**SYMBOL**

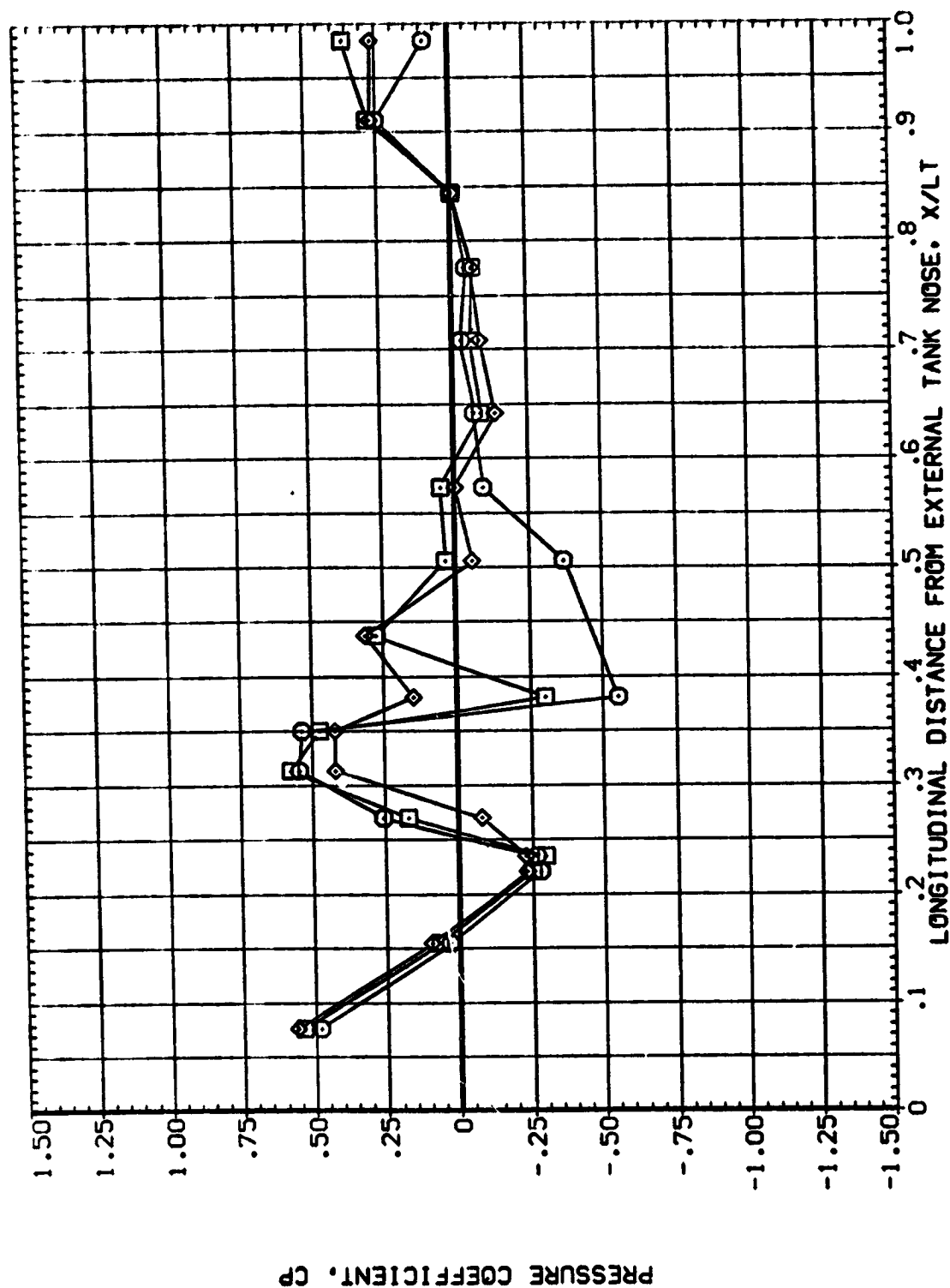
**PHI**  
**270.000**  
**288.000**  
**306.000**

BETA	MACH
4.000	1.250

REFERENCE DATA
SREF 6.198
LREF 5.313
EREF 5.313
XMRP 2.549
YMRP .000
ZMRP .000

PARAMETRIC VALUES	
-5.000	CONF16
.140	RUDDER
.000	ORBITAL
90.000	
.000	
.500	

ALPHA  
DELTA Z  
X-SRB



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 324.000  
 342.000  
 360.000

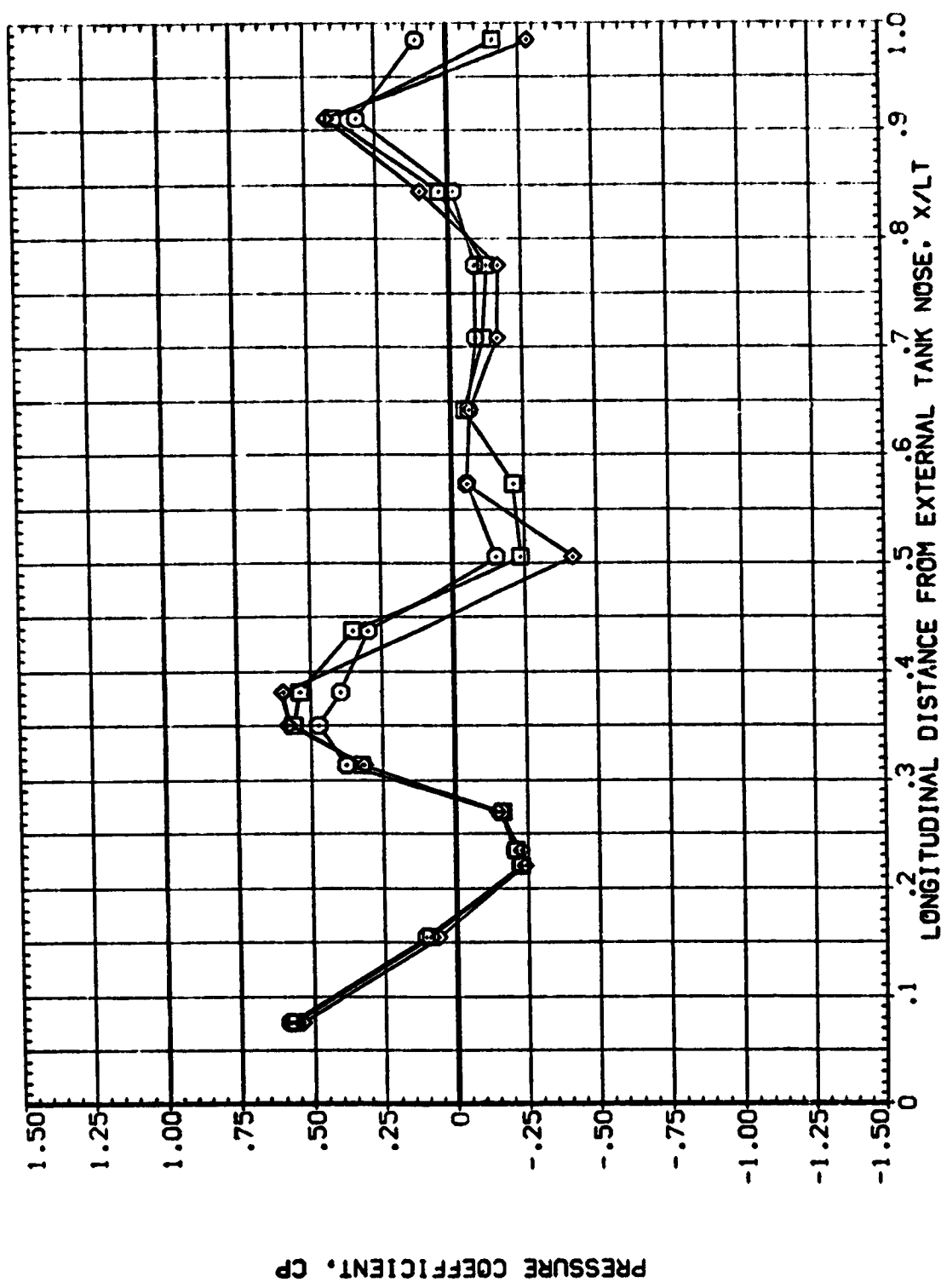
BETA  
 4.000

MACH  
 1.250

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XMRP 2.548 IN.  
 YMRP .000 IN.  
 ZMRP .000 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 -5.000 CONFIS 90.000  
 .140 RATER .000  
 .003 DBBINC .000

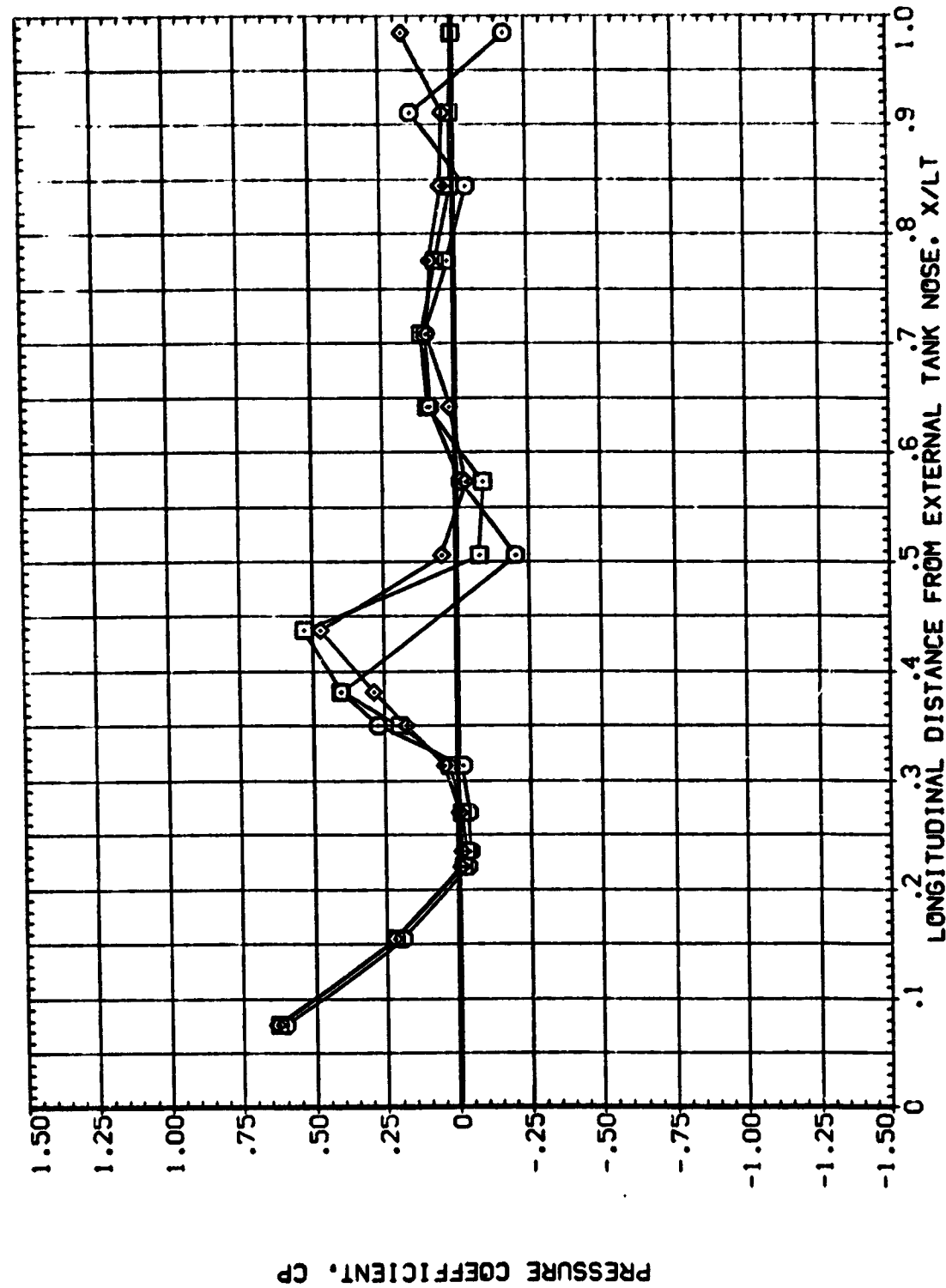


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

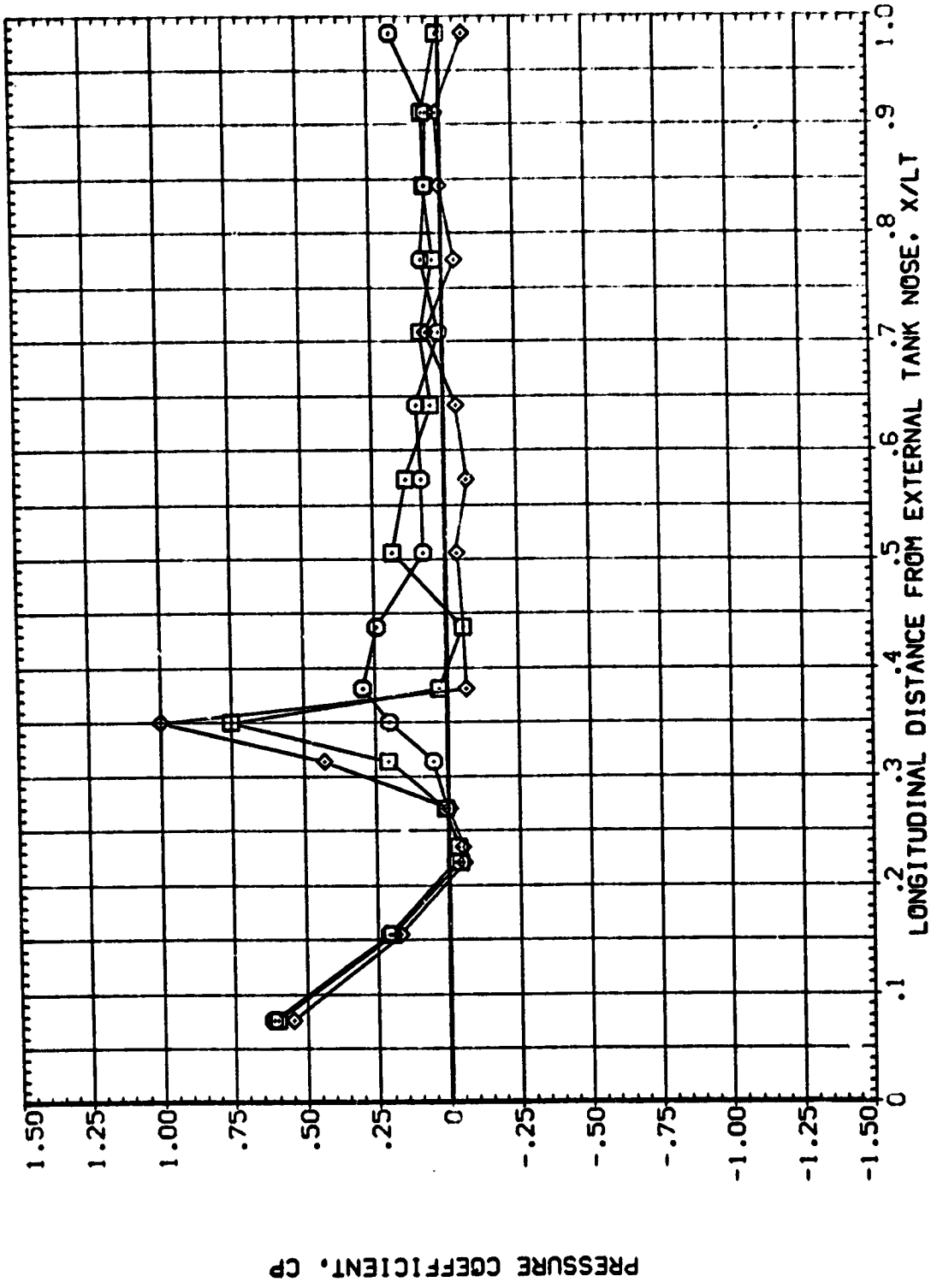
SYMBOL	PHI		BETA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	0.000	18.000	36.000	-4.000	1.960		SREF	LREF	BREF	XMRP	YMRP	ZMRP	50. IN.	ALPHA
□	.000	.000	.000	-4.000	1.960		5.198	5.313	5.313	2.549	.000	.000	90.000	-5.000
◇	.000	.000	.000	-4.000	1.960		5.198	5.313	5.313	2.549	.000	.000	90.000	.140
	.000	.000	.000	-4.000	1.960		5.198	5.313	5.313	2.549	.000	.000	90.000	.000
	.000	.000	.000	-4.000	1.960		5.198	5.313	5.313	2.549	.000	.000	90.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	54.000	72.000	-4.000	1.960	SREF	LREF	BREF	XMRP	50. IN.	IN.	IN.	IN.
○	54.000	72.000	-4.000	1.960	6.198	5.313	5.313	2.541	6.198	5.313	5.313	2.541
□	54.000	72.000	-4.000	1.960	6.198	5.313	5.313	2.541	6.198	5.313	5.313	2.541
◇	54.000	72.000	-4.000	1.960	6.198	5.313	5.313	2.541	6.198	5.313	5.313	2.541

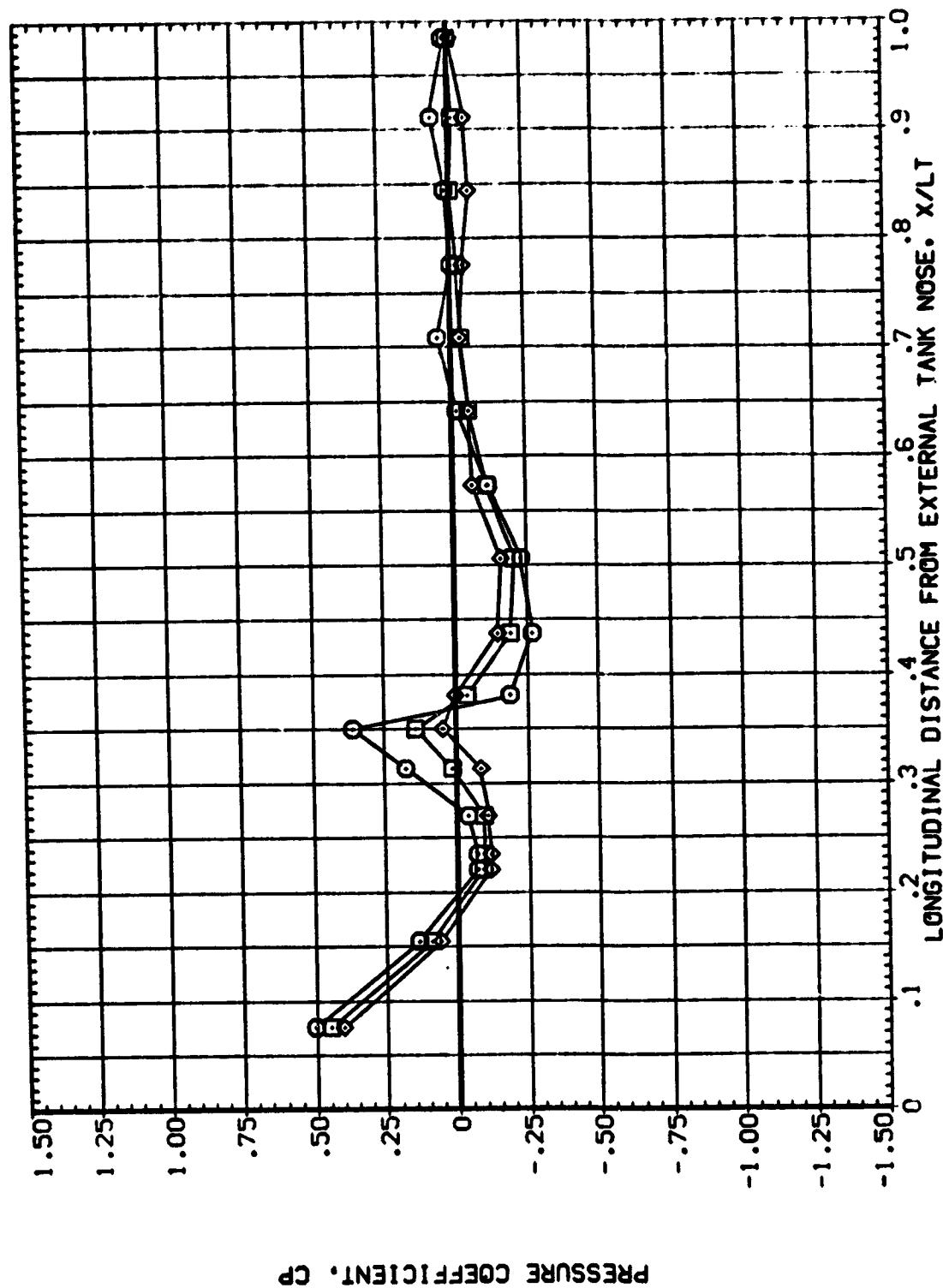


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

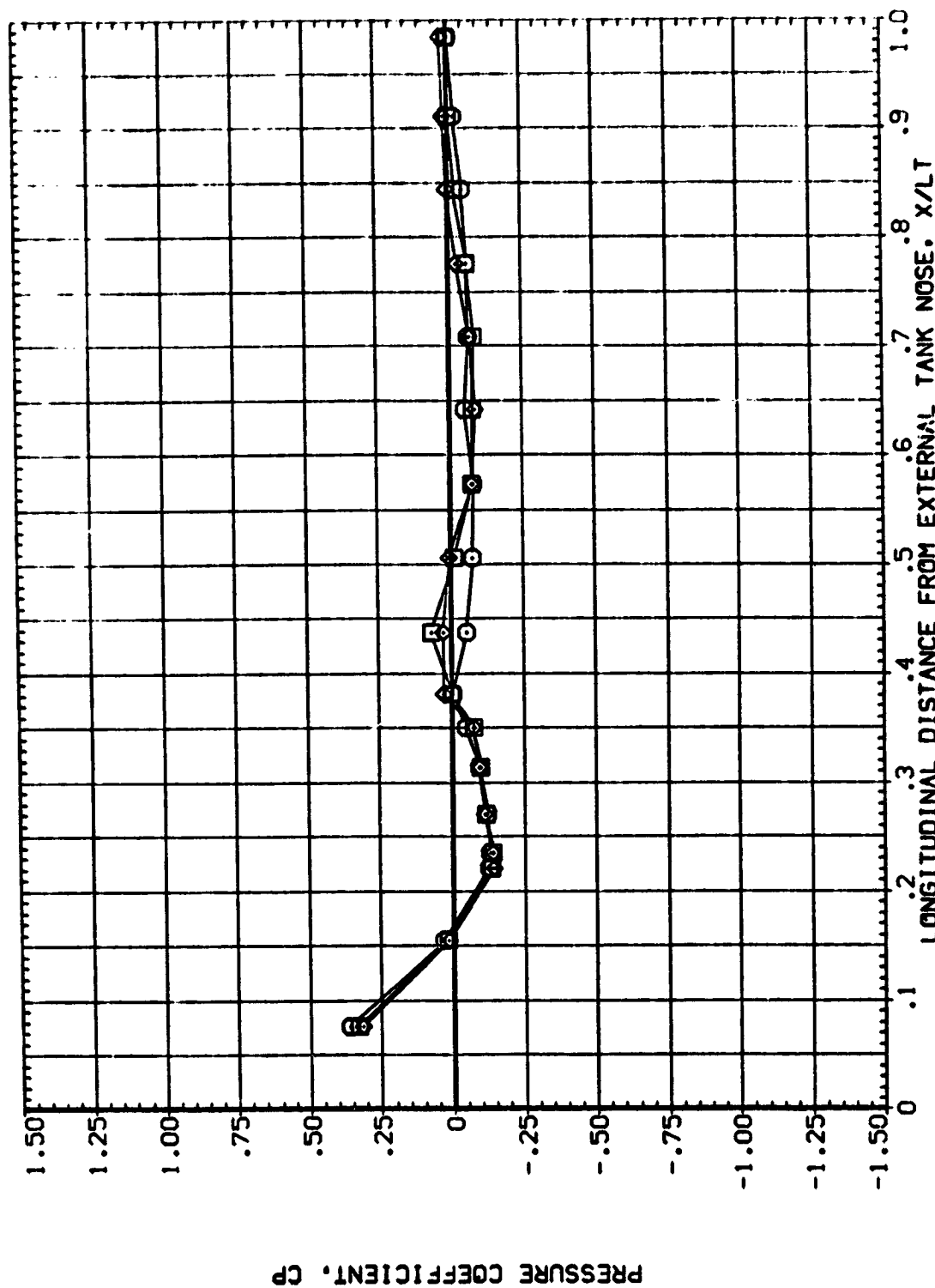
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	CCV TIS	CCV TIS
○	108.000	-4.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	RCDER
□	126.000							IN.	X-SRB	.000	ORBITC
◇	144.000							IN.			.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

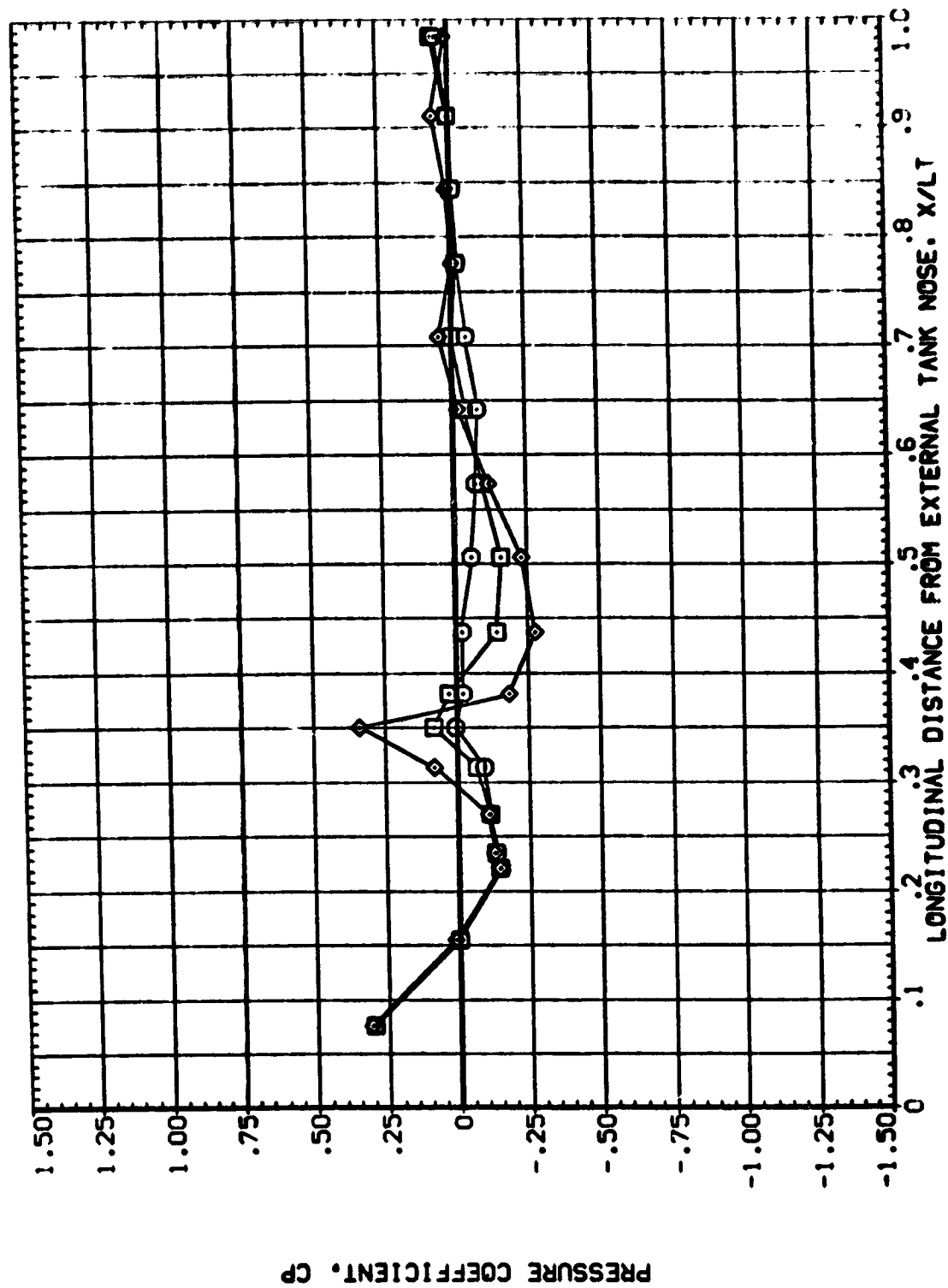
PHI	BETA	MACH	REFERENCE DATA	ALPHA	PARAMETRIC VALUES
162.000	-4.000	1.960	SREF 6.198	DELTAZ	-5.000
160.000			LREF 5.313	X-SRB	.140
198.000			BREF 5.313		.000
			YMRP 2.549		.000
			ZMRP .000		.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	50. IN.	ALPHA	-5.000	CONFIS	90.000	
○	216.000	-4.000	1.960	LREF	5.313	IN.	DELTA2	.140	RUDER	.000	
□	234.000			BREF	5.313	IN.	X-SRB	.000	DEFIN	.500	
◇	252.000			XMRP	2.549	IN.					
				YMRP	.000	IN.					
				ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A821C4)

SYMBOL  
 ○ □ ◇

PHI  
 270.000  
 288.000  
 306.000

BETA  
 -4.000

MACH  
 1.960

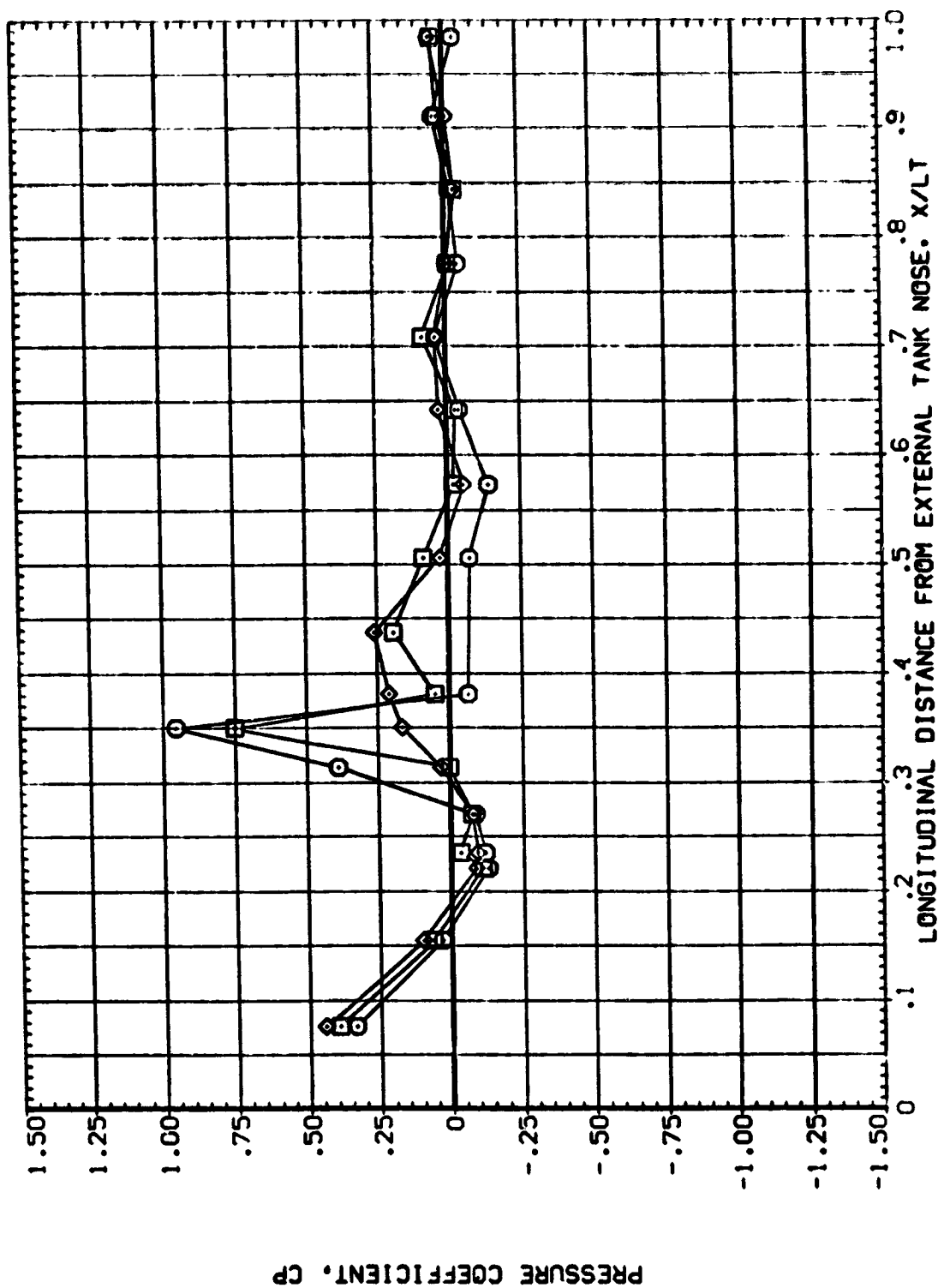
REFERENCE DATA  
 SREF 6.198  
 QREF 5.313  
 SREF 5.313  
 AREF 2.549  
 YREF .000  
 ZREF .000

PARAMETRIC VALUES  
 -5.000  
 .000  
 .000  
 .000  
 .000  
 .000

CONFIG  
 BLDER  
 XBINC

ALPHA  
 DELTA  
 A-SRB

50 IN.  
 IN.  
 IN.  
 IN.  
 IN.

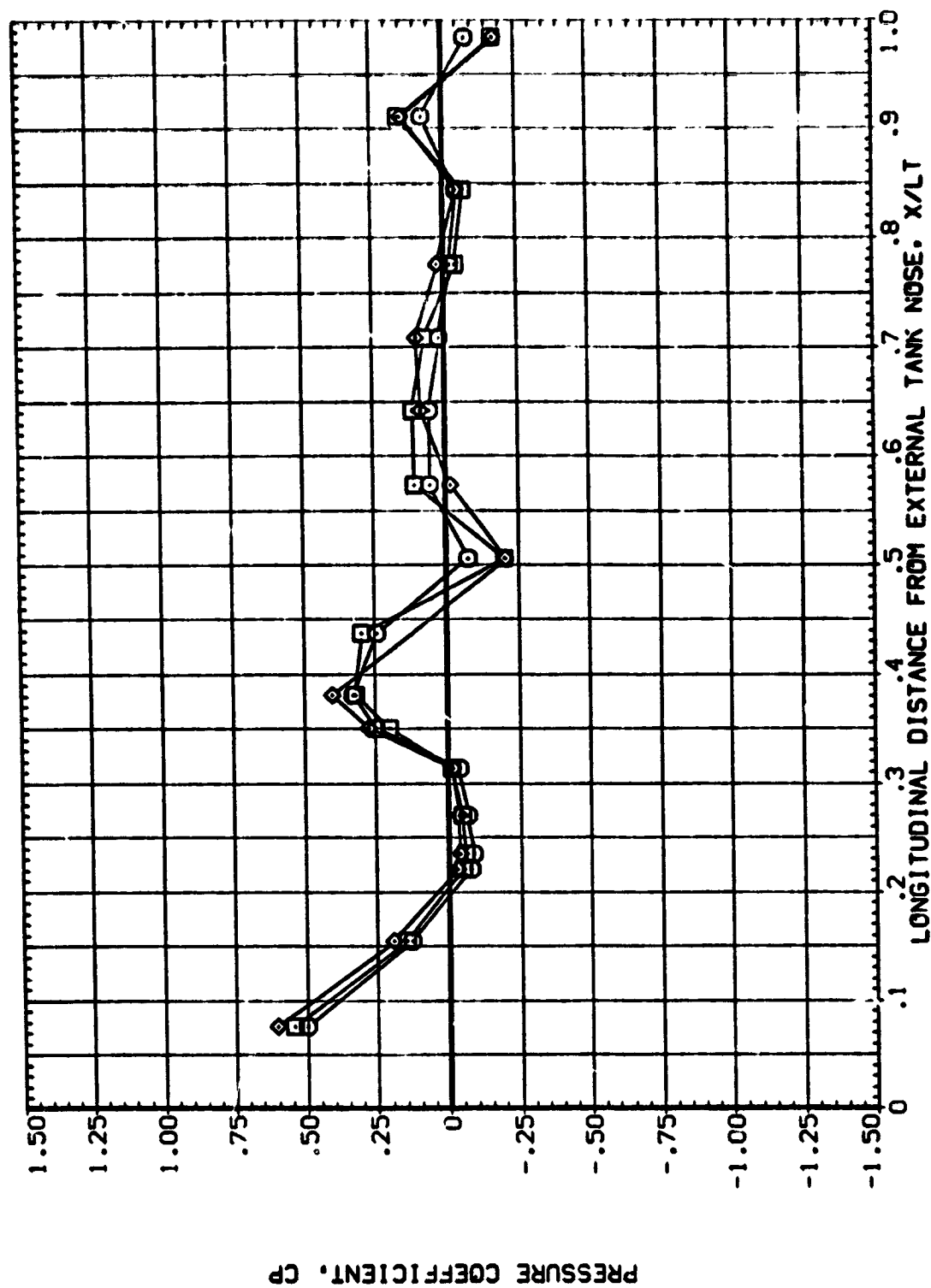


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82704)

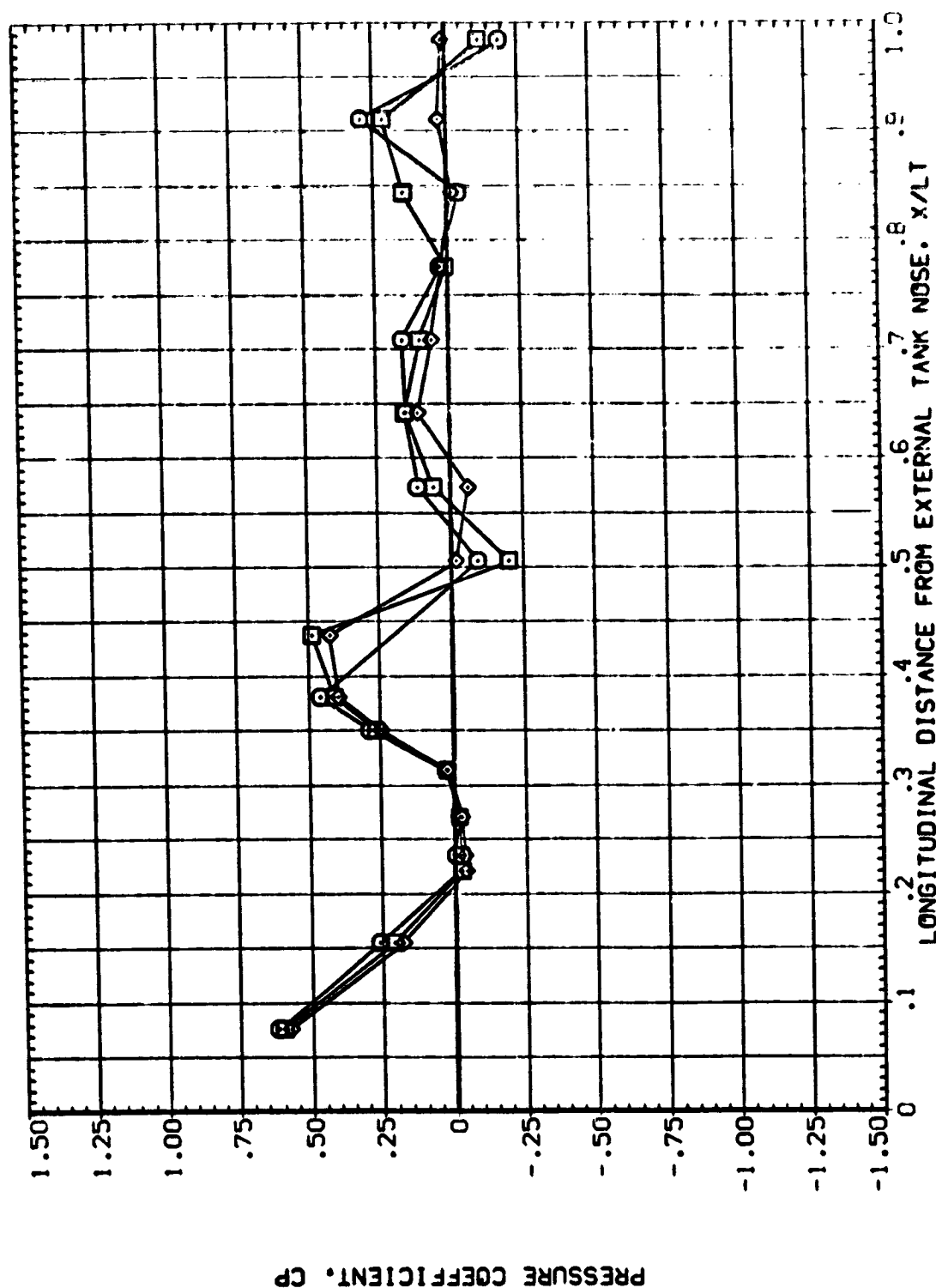
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	ALPHA	90.000
○	324.000	-4.000	1.960	LREF	5.313 IN.	DELTA Z	0.000
□	342.000			BREF	5.313 IN.	1-SRB	0.000
◇	360.000			XPRP	2.549 IN.		0.000
				YPRP	.000 IN.		0.000
				ZPRP	.000 IN.		0.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK AIRFLOW

SYMBOL	PHI	BETA	MACH	REFERENCE DATA	ALPHA	PARAMETER
○	.000	.000	1.960	SREF 6.198	DELTAZ	REF
□	18.000			LREF 5.313	N-508	ORBIT
◇	36.000			BREF 5.313		
				MREF 2.549		
				YREF .000		
				ZREF .000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

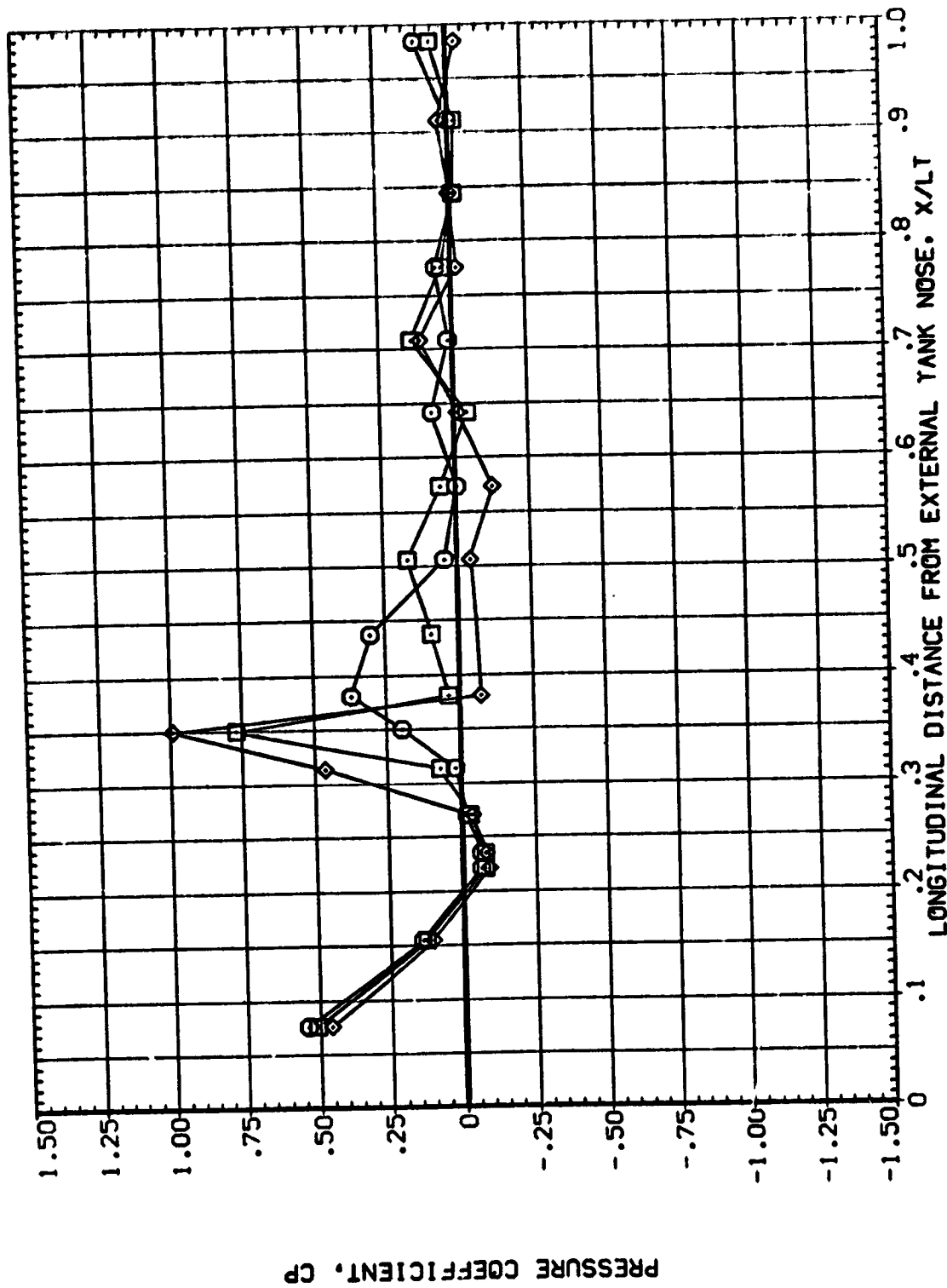
PHI 54.000  
 72.000  
 90.000

BETA .000

MACH 1.960

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XMRP 2.548 IN.  
 YMRP .000 IN.  
 ZMRP .000 IN.

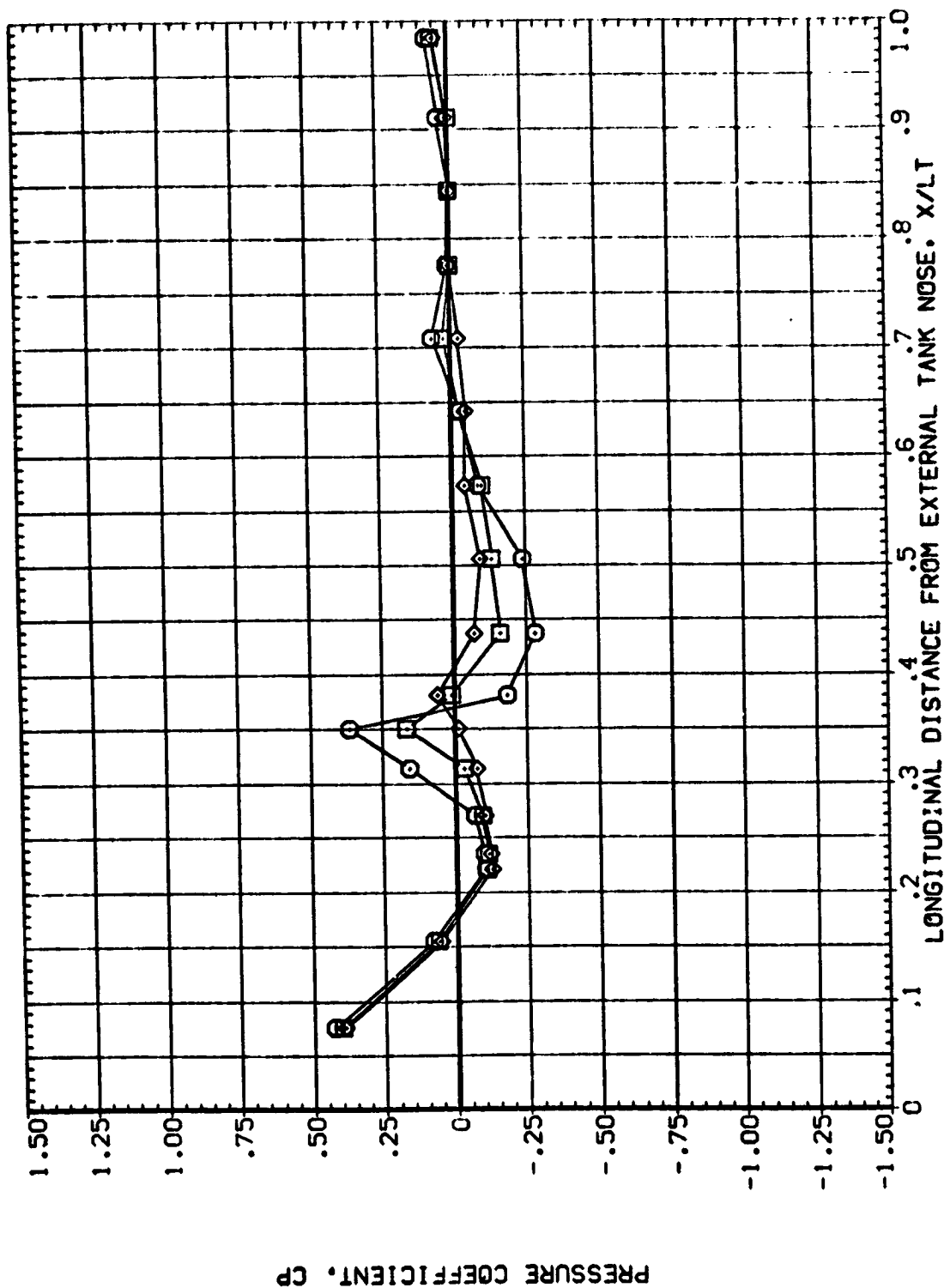
PARAMETRIC VALUES  
 -5.000 CONFIG  
 .140 RUDDER  
 .000 ORBINC  
 90.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82104)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000			SREF	LREF	BREF	XMRP	SO. IN.	IN.	IN.	IN.
○	108.000	126.000	.000	1.960	6.198	5.313	5.313	2.549				
□	108.000	126.000	.000	1.960	6.198	5.313	5.313	2.549				
◇	108.000	126.000	.000	1.960	6.198	5.313	5.313	2.549				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○ □ ◇

PHI  
 162.000  
 180.000  
 198.000

BETA  
 .000

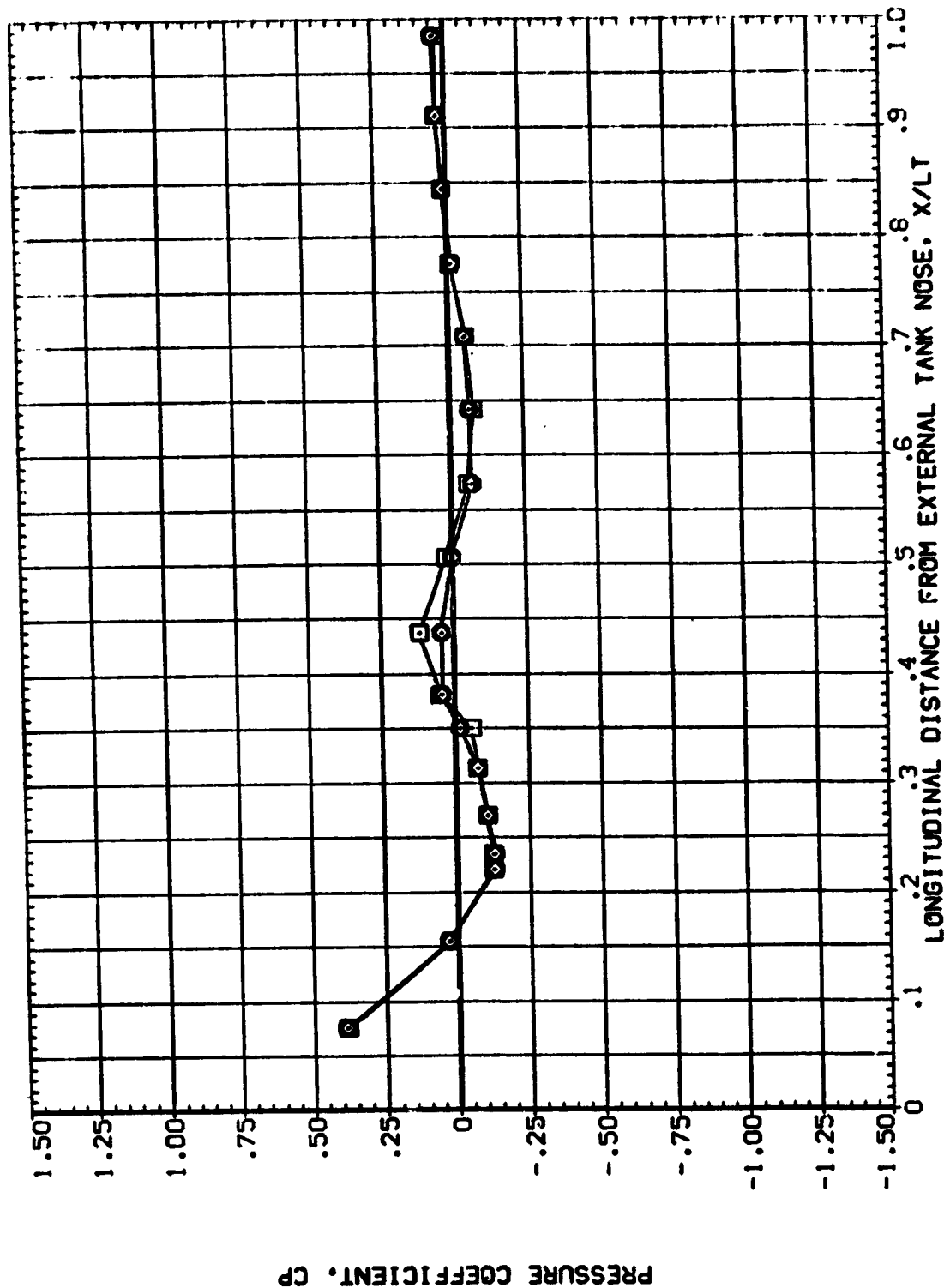
MACH  
 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-598

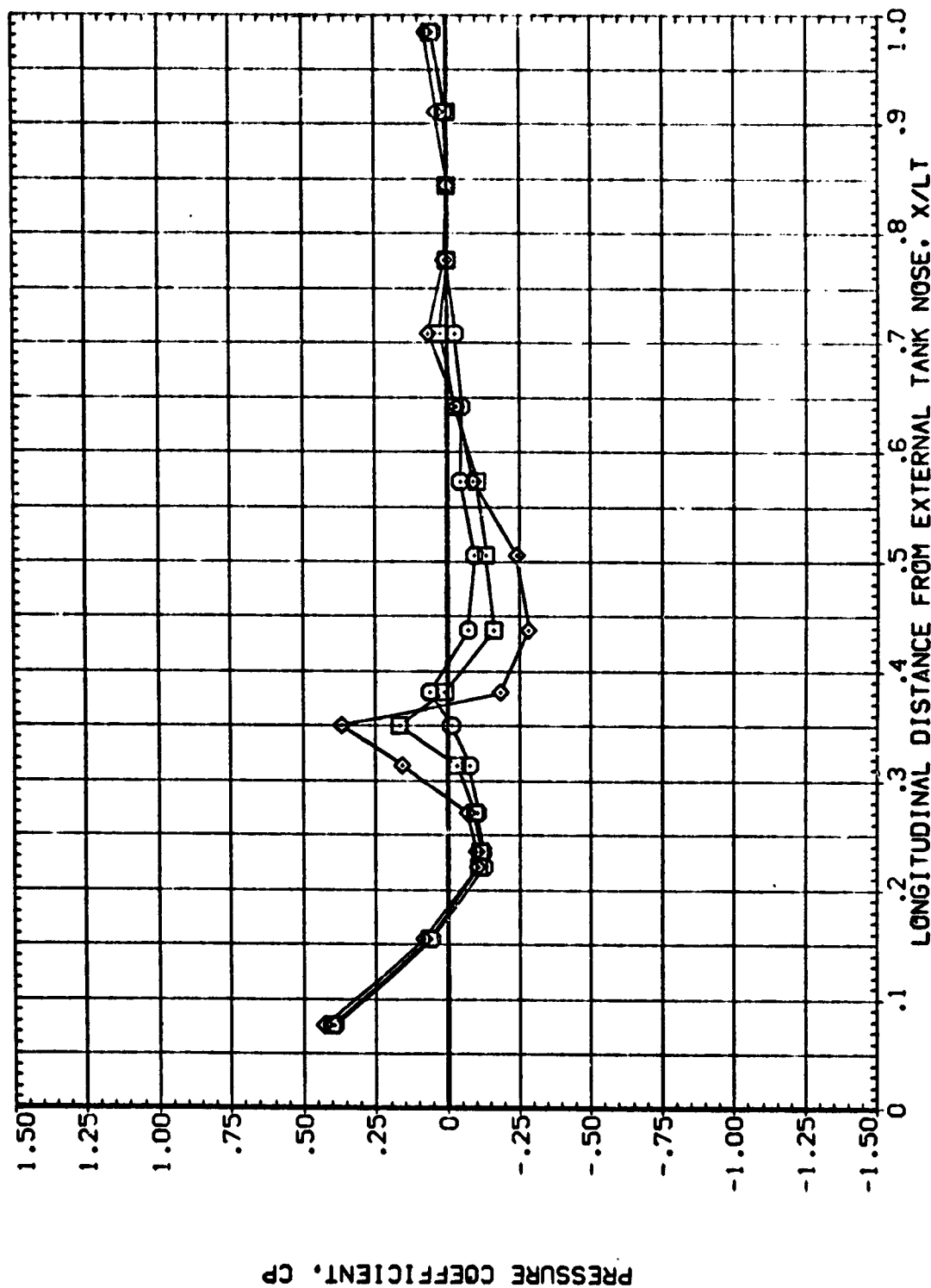
PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (AS2T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	ZMRP	50. IN.	IN.	IN.
○	216.000	.000	1.960	5.198	5.313	5.313	2.549	.000	.000	.000	.000
□	234.000								.140	.000	.000
◇	252.000								.000	.000	.500

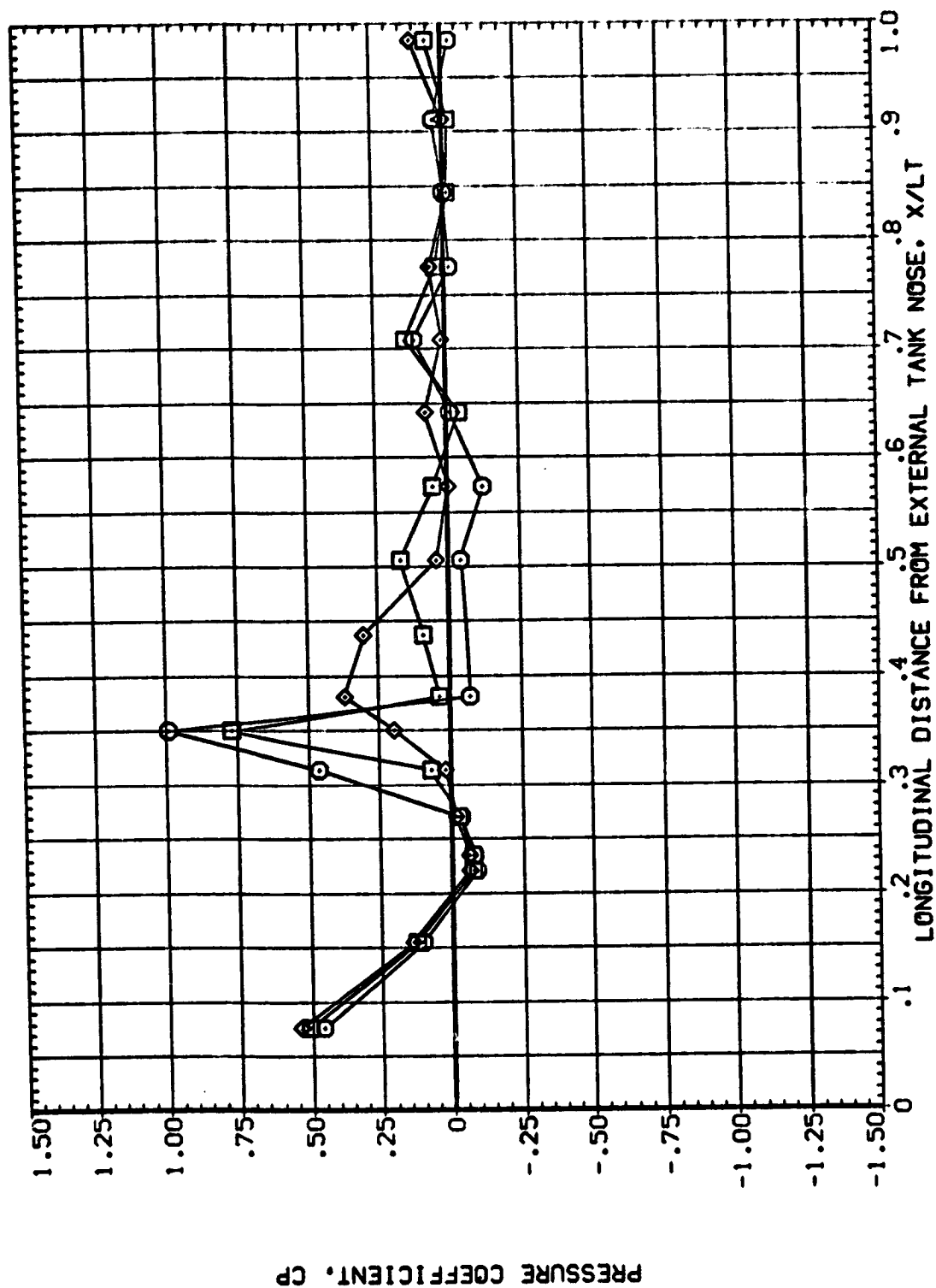


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

PHI	BETA	MACH	REFERENCE DATA	ALPHA	PARAMETRIC VALUES
270.000	.000	1.960	SREF 6.198	-5.000	CONF IG 90.000
288.000			LREF 5.313	.140	RUDER .000
306.000			XMRP 2.549	.000	ORBIT INC .500
			ZMRP .000	X-SRB	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 324.000  
 342.000  
 360.000

BETA  
 .000

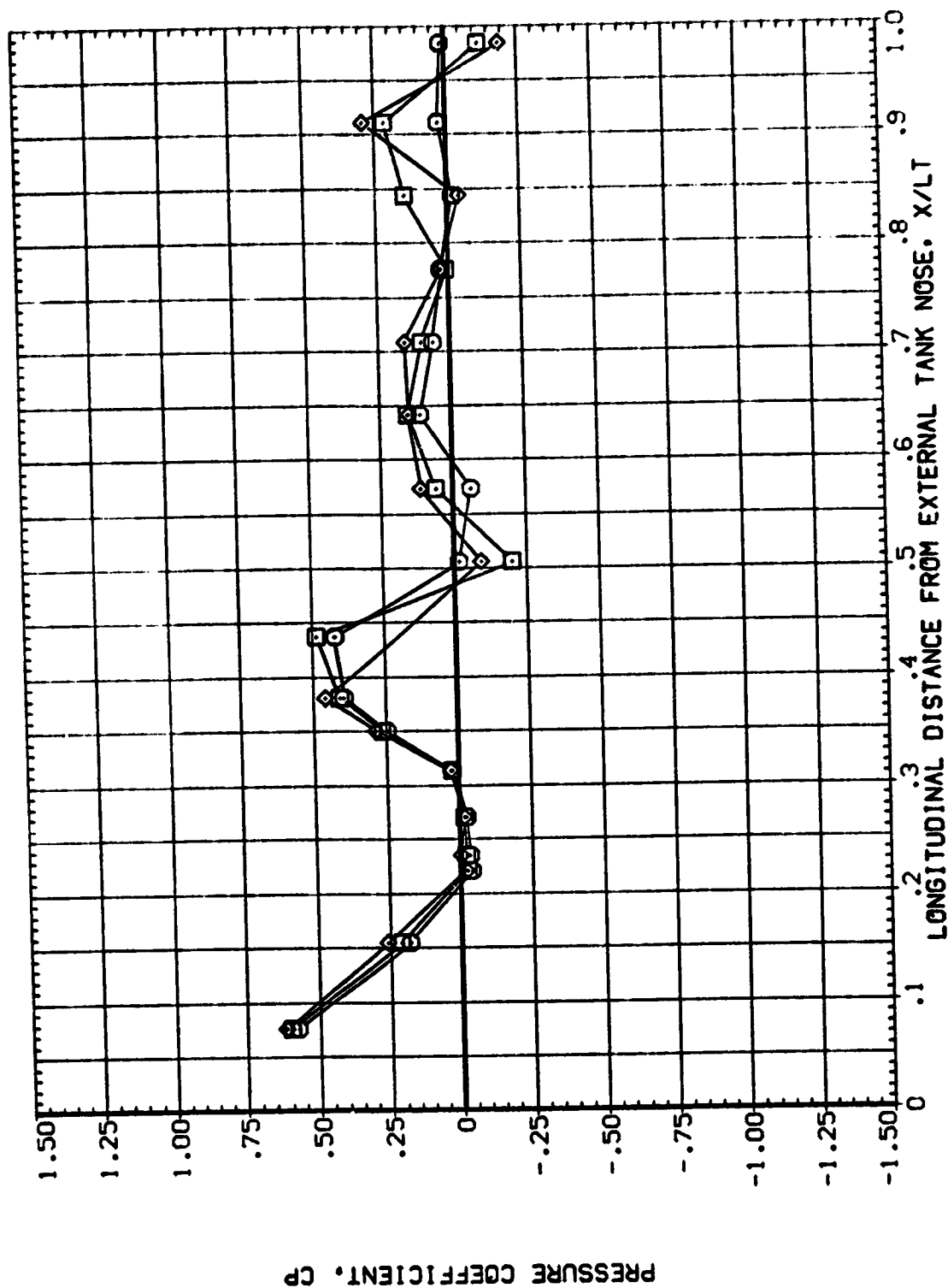
MACH  
 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

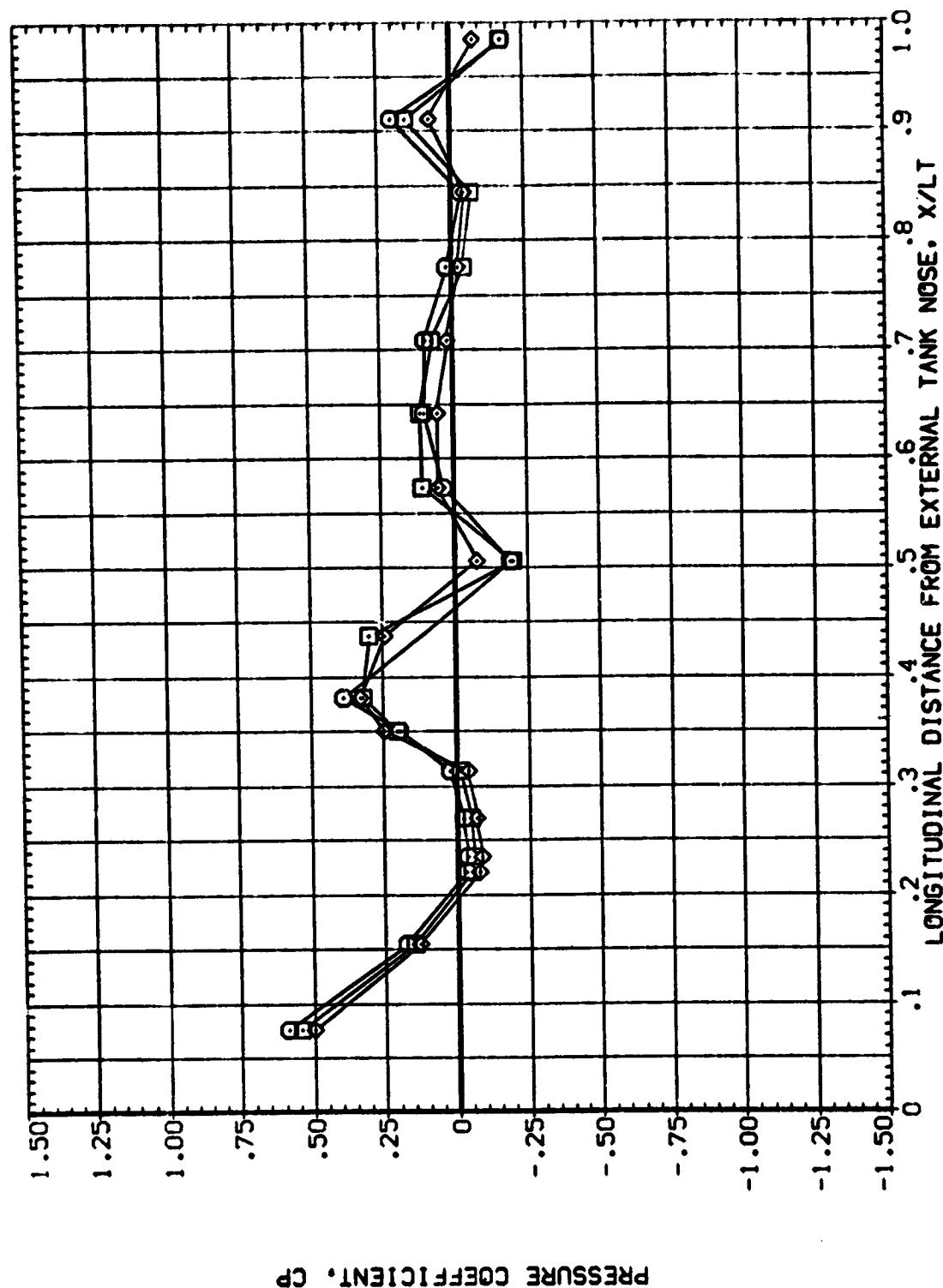
PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	VMRP	50. IN.	ALPHA	CONF16	90.000
○	.000	4.000	1.960	6.198	5.313	5.313	.000	IN.	DELTA Z	.000	.000
□	18.000			2.549	2.549	2.549	.000	IN.	X-SRB	.140	.000
◇	36.000			.000	.000	.000	.000	IN.	ORBITAL	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F, T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

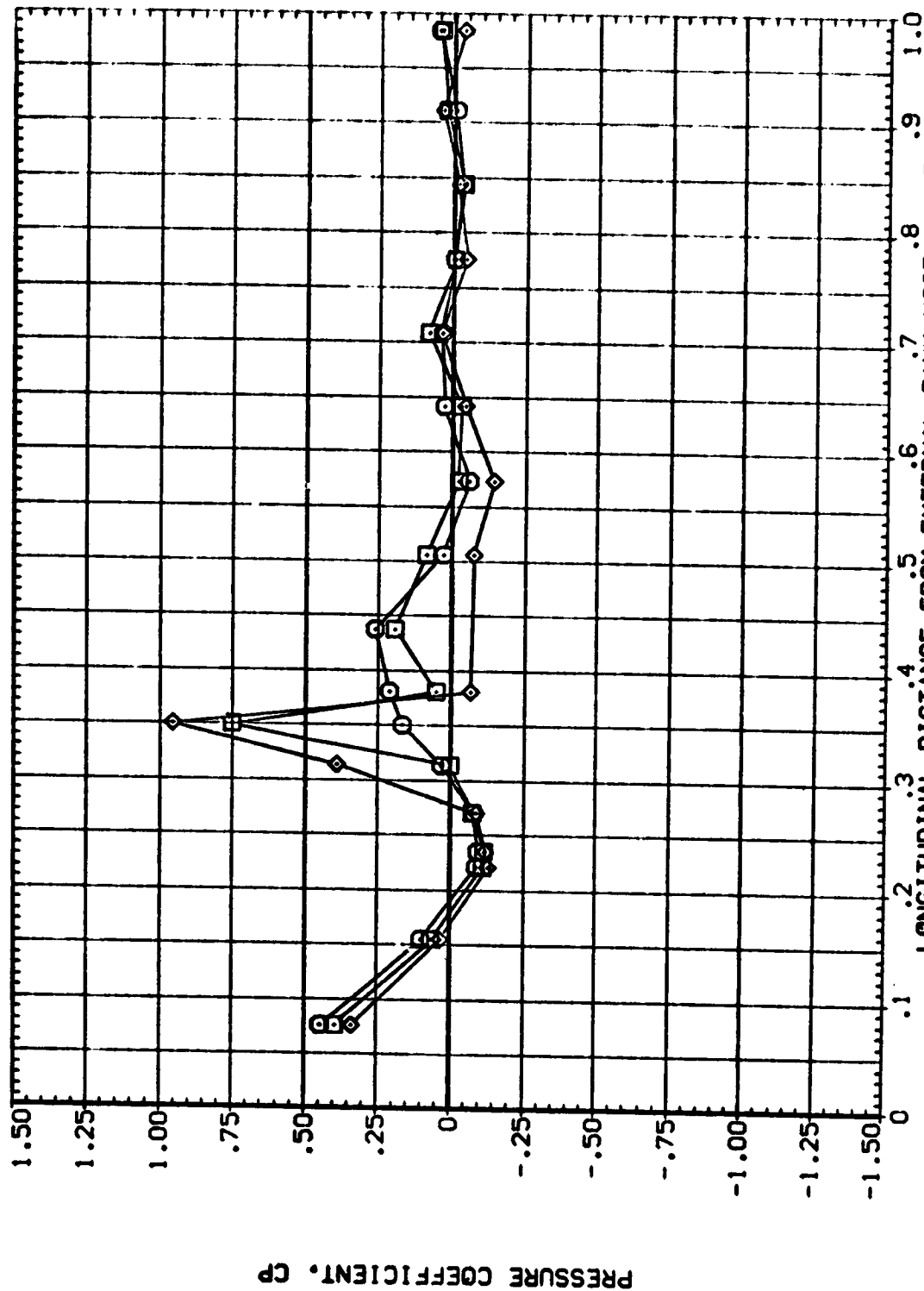
SYMBOL  
 □  
 ◇

PHI  
 54.000  
 72.000  
 90.000

BETA  
 4.000  
 1.960

REFERENCE DATA  
 SREF 6.198 50. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XMRP 2.549 IN.  
 YMRP .000 IN.  
 ZMRP .000 IN.

PARAMETRIC VALUES  
 -5.003 CONF16 90.000  
 .140 RUDDER .007  
 .000 ORBINC .5



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 108.000  
 126.000  
 144.000

BETA  
 4.000

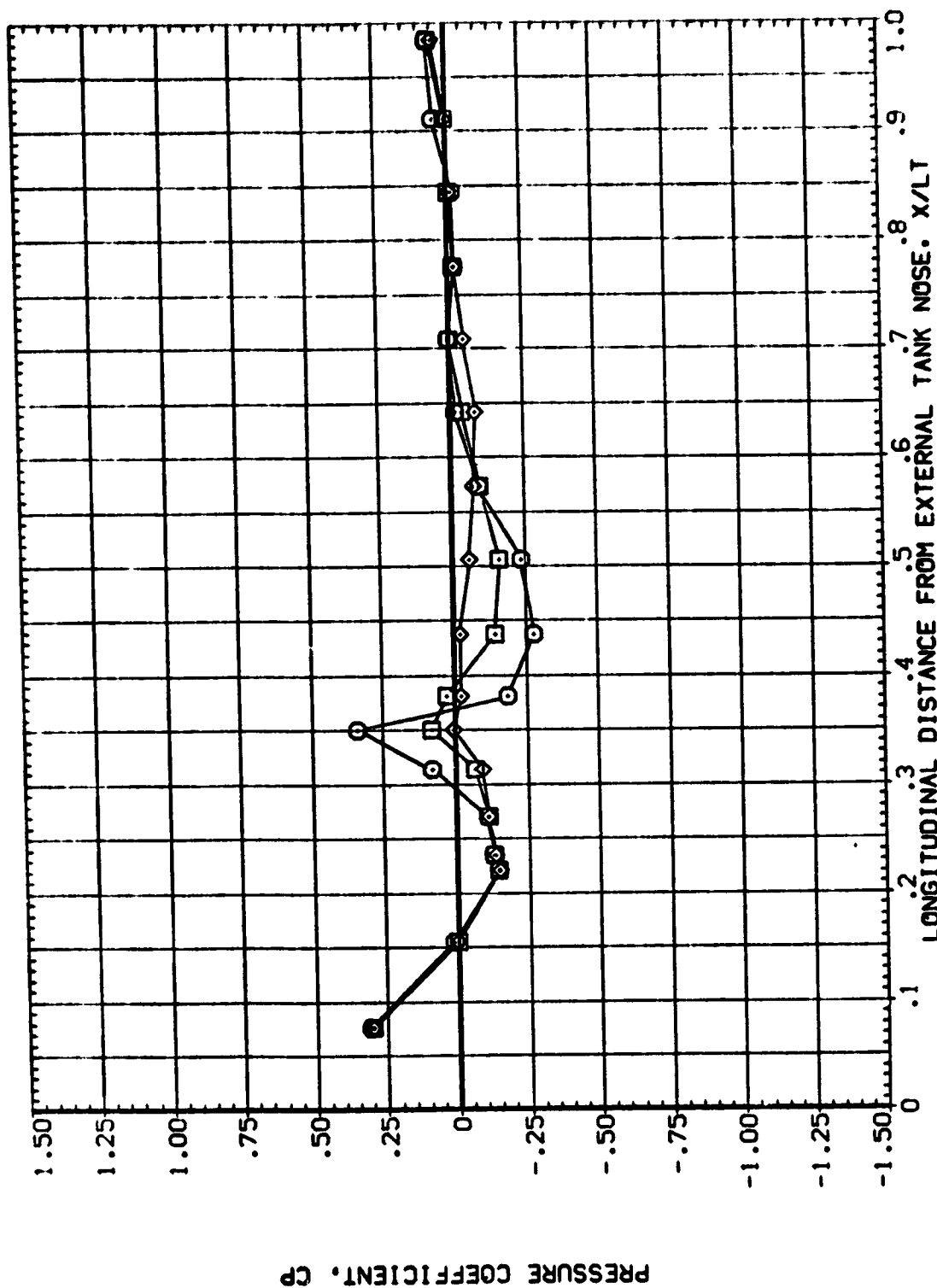
MACH  
 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 XREF 5.313  
 YMRP 2.549  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

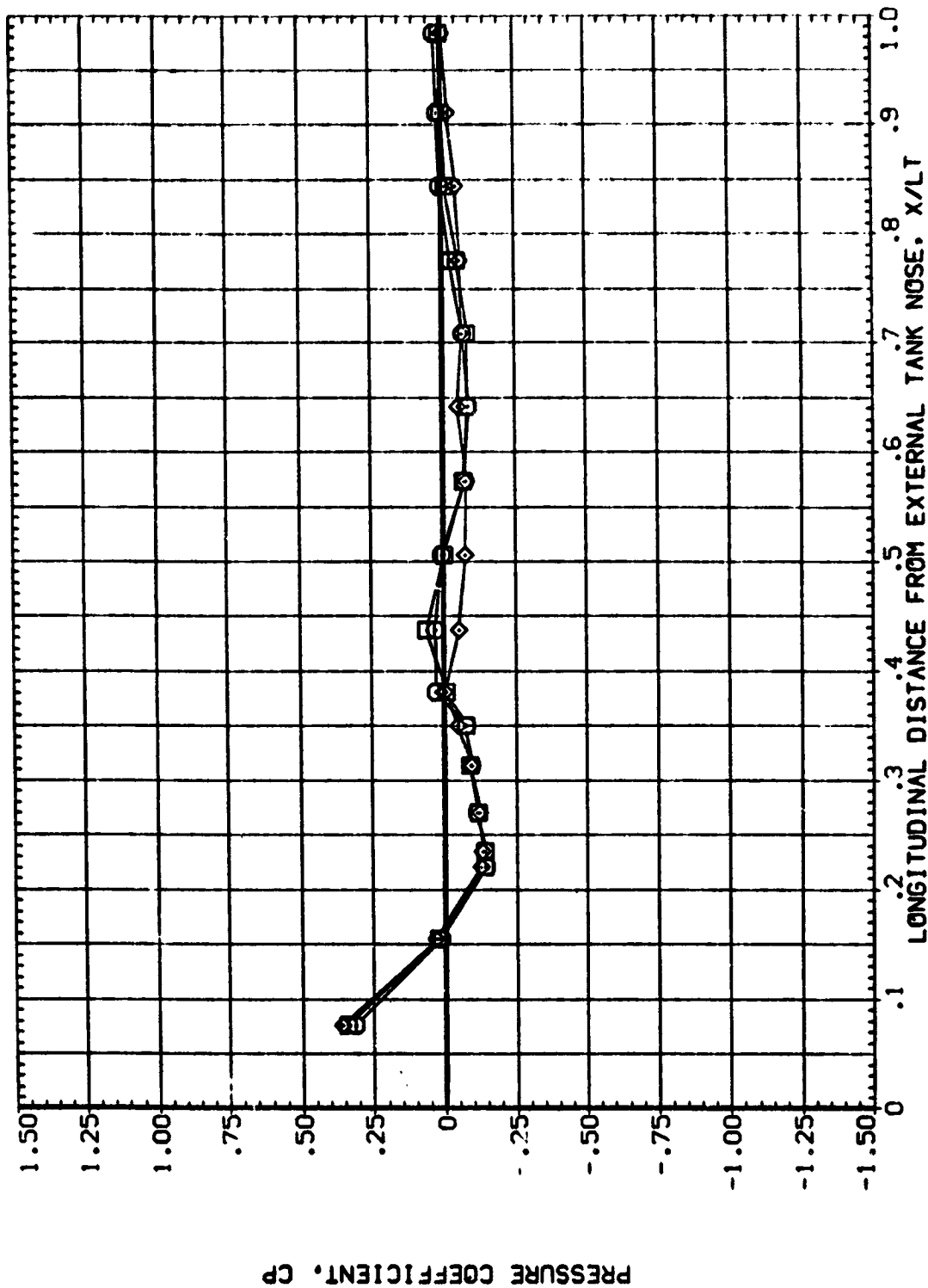
PARAMETRIC VALUES  
 -9.000  
 .140  
 .000  
 .000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82'04)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	162.000	180.000	4.000	1.960			SREF	ALPHA	CONFIS	CONFIS
□	162.000	180.000	4.000	1.960			LREF	DELTAZ	.140	RLODER
◇	198.000						BREF	X-SRB	.000	DSBINC
							XPRP			
							YMRP			
							ZMRP			

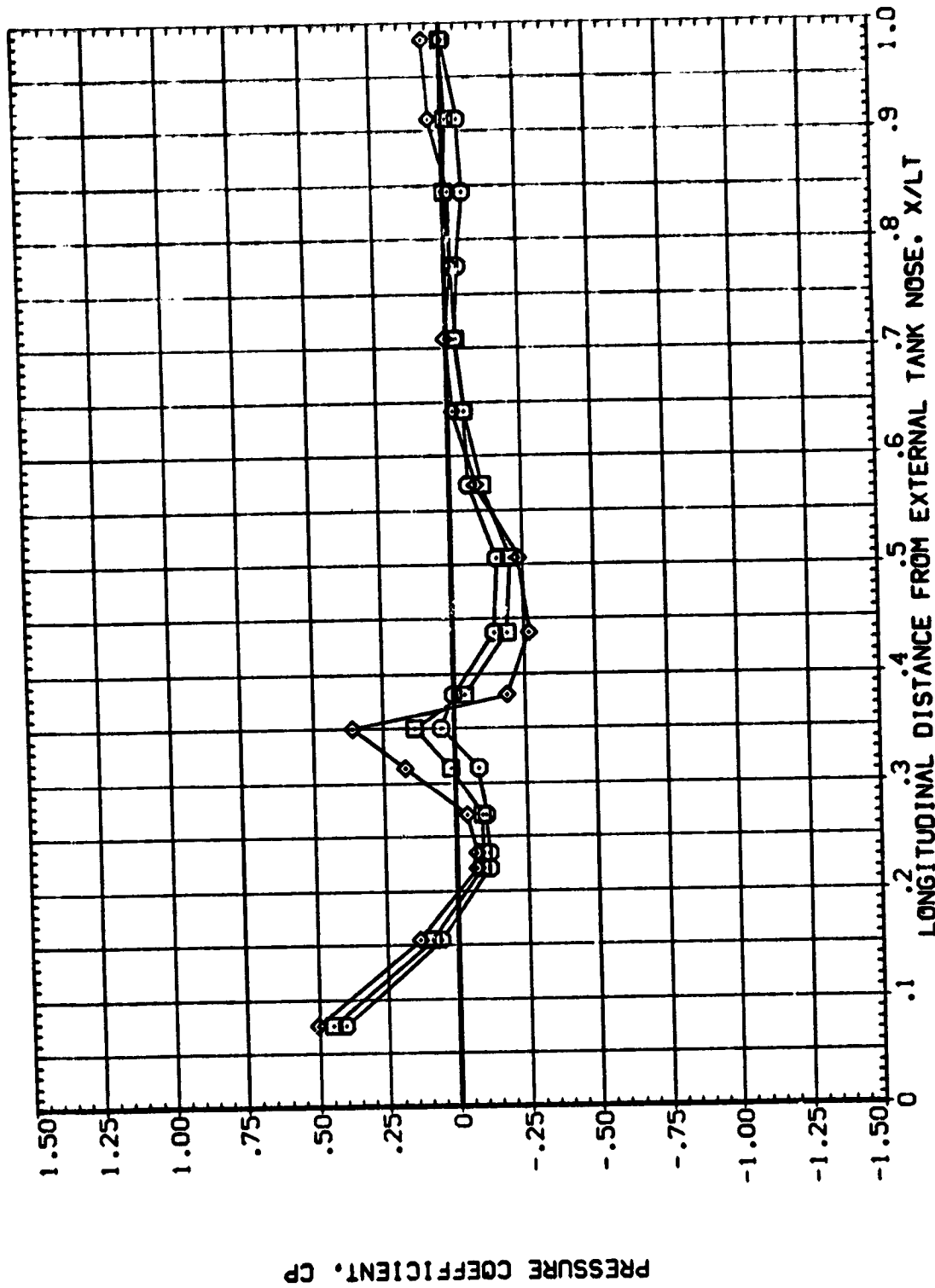


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	216.000	234.000	4.000	1.960	SREF	UREF	BREF	XMRP	ALPHA	CONFIG	CONFIG	CONFIG
□	216.000	234.000	4.000	1.960	6.199	5.313	5.313	2.549	DELTAZ	.140	RUCOR	.000
◇	252.000								X-SUB	.000	ORBITAL	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# EXTERNAL TANK (A82T04)

MSFC 567(1A32F) T9 S3/2 S3/2 03

SYMBOL

PMI  
270.000  
288.000  
306.000

BETA  
4.000

MACH  
1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
VMRP 2.549  
ZMRP .000

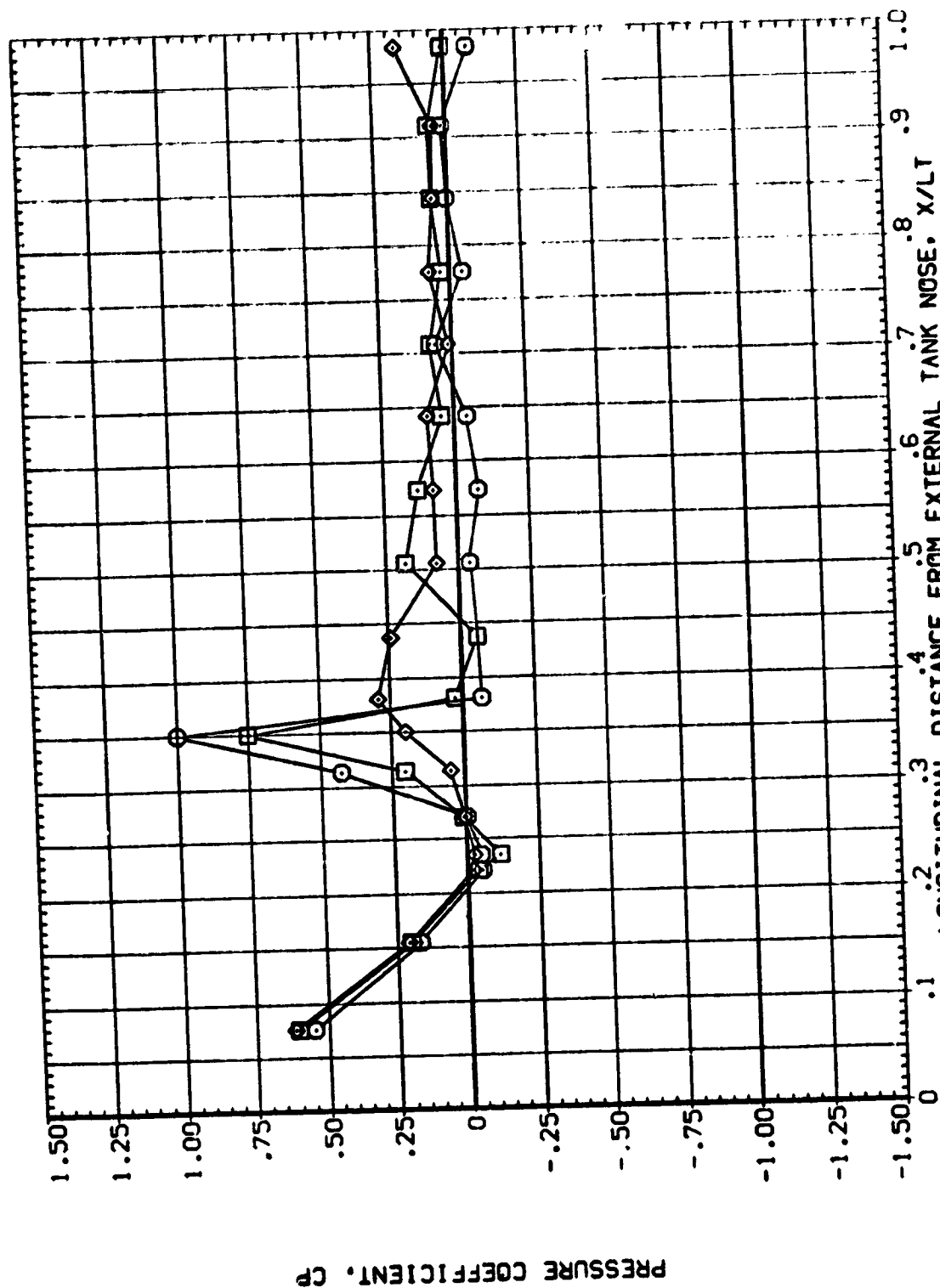
SQ. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
-5.000  
.140  
.000

CONF IG  
RUDER  
ORBITAL

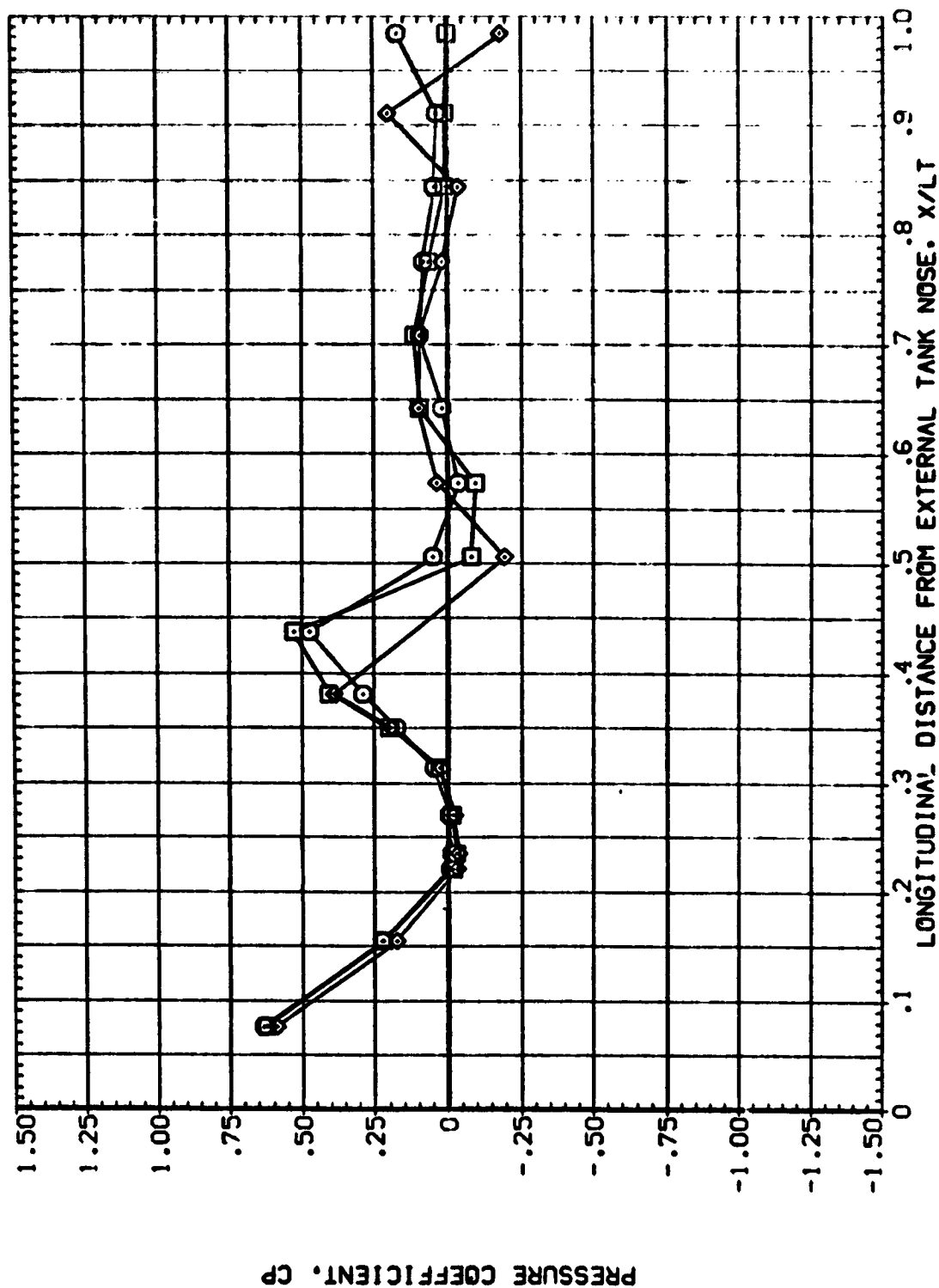
SC. DCC  
.07C  
.50C



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIS	50.000
○	324.000	4.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTAZ	RUDER	.000
□	342.000							IN.	1-508	ORBITAL	.500
◇	360.000							IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ◇  
 □  
 ○

PHI  
 .000  
 18.000  
 36.000

BETA  
 -4.000

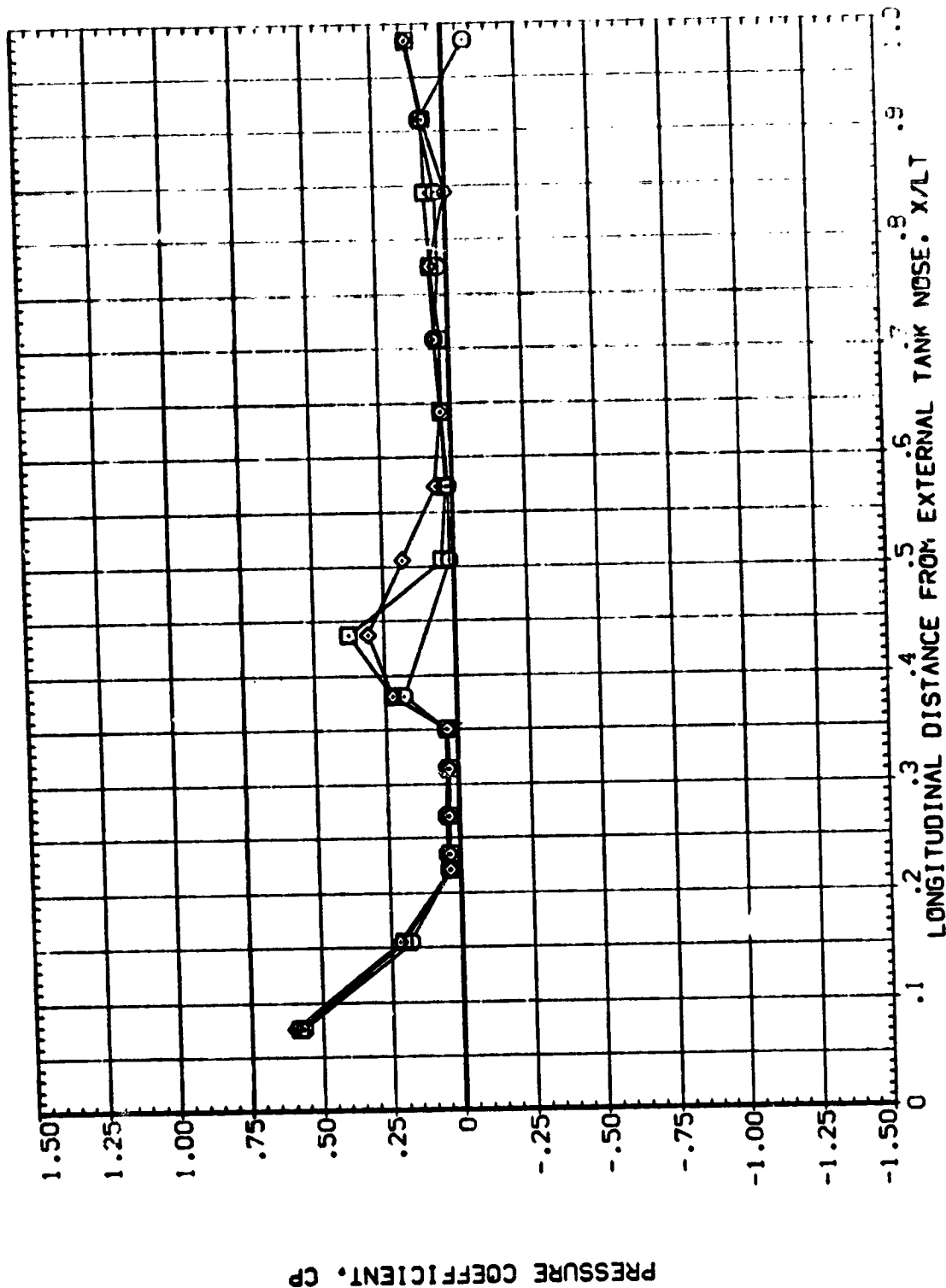
MACH  
 3.480

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

50. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000  
 .500

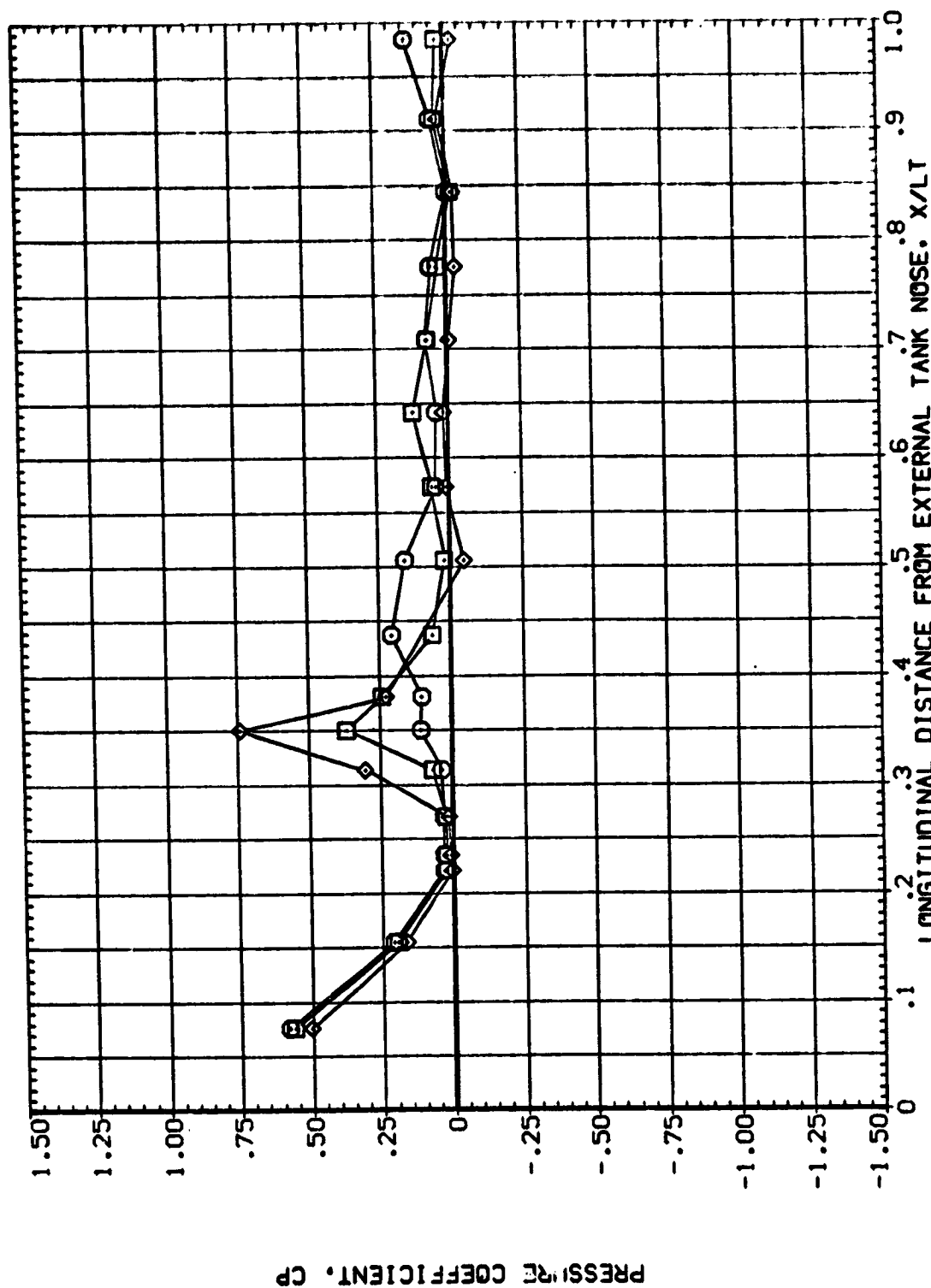


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	PHI	BETA	MACH	ALPHA	CONFIG	
○	54.000	-4.000	3.480	-5.000	.140	.000
□	72.000			.000	.000	.000
◇	90.000			X-SRB	ORBIT	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
□  
◇

PMI  
108.000  
126.000  
144.000

BETA  
-4.000

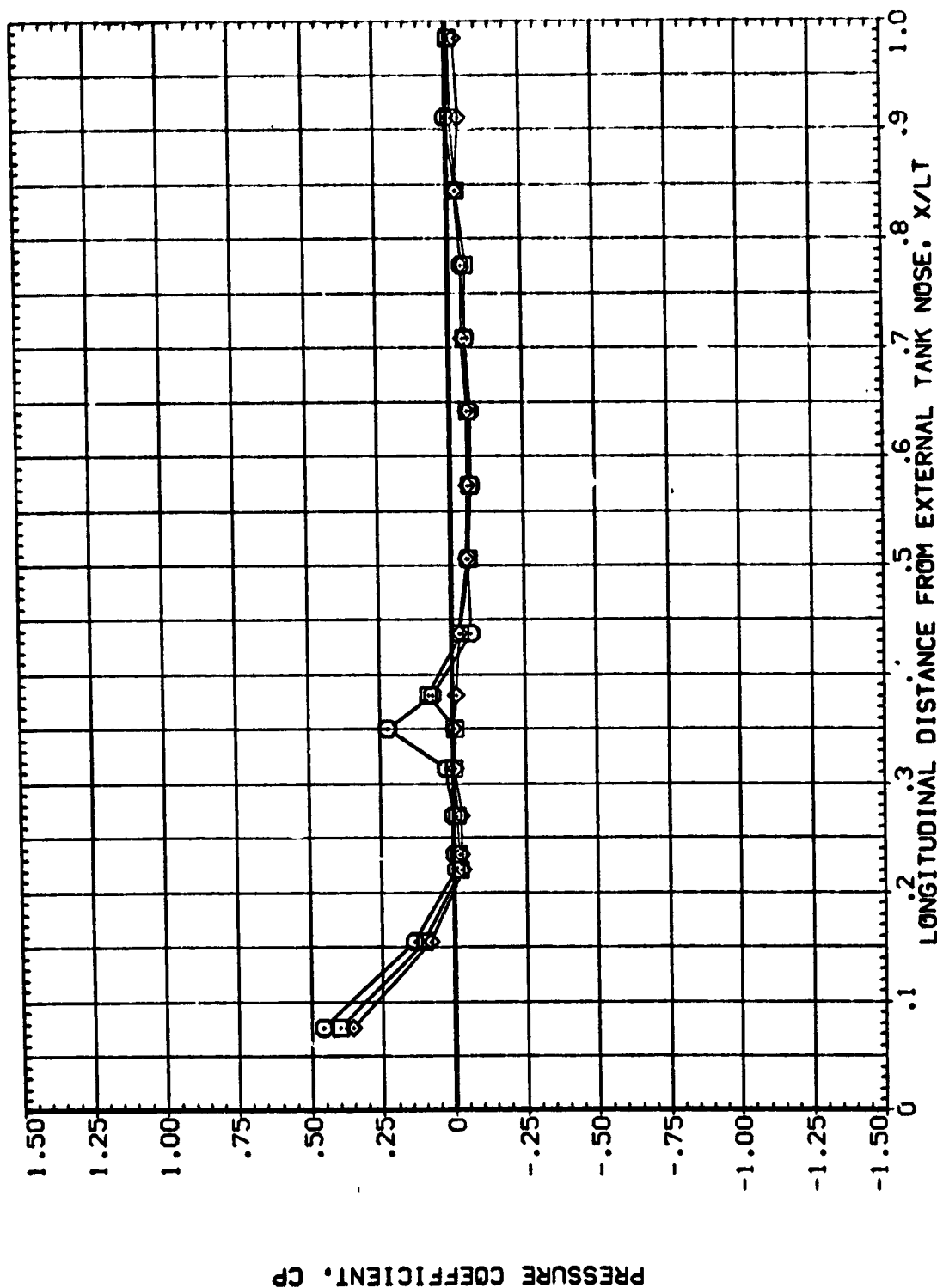
MACH  
3.480

REFERENCE DATA  
SREF 5.198  
LREF 5.313  
BREF 5.313  
XMRP 2.542  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
CONVIG 90.000  
QCDOR 0.000  
ORBIN 0.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 162.000  
 180.000  
 198.000

BETA  
 -4.000

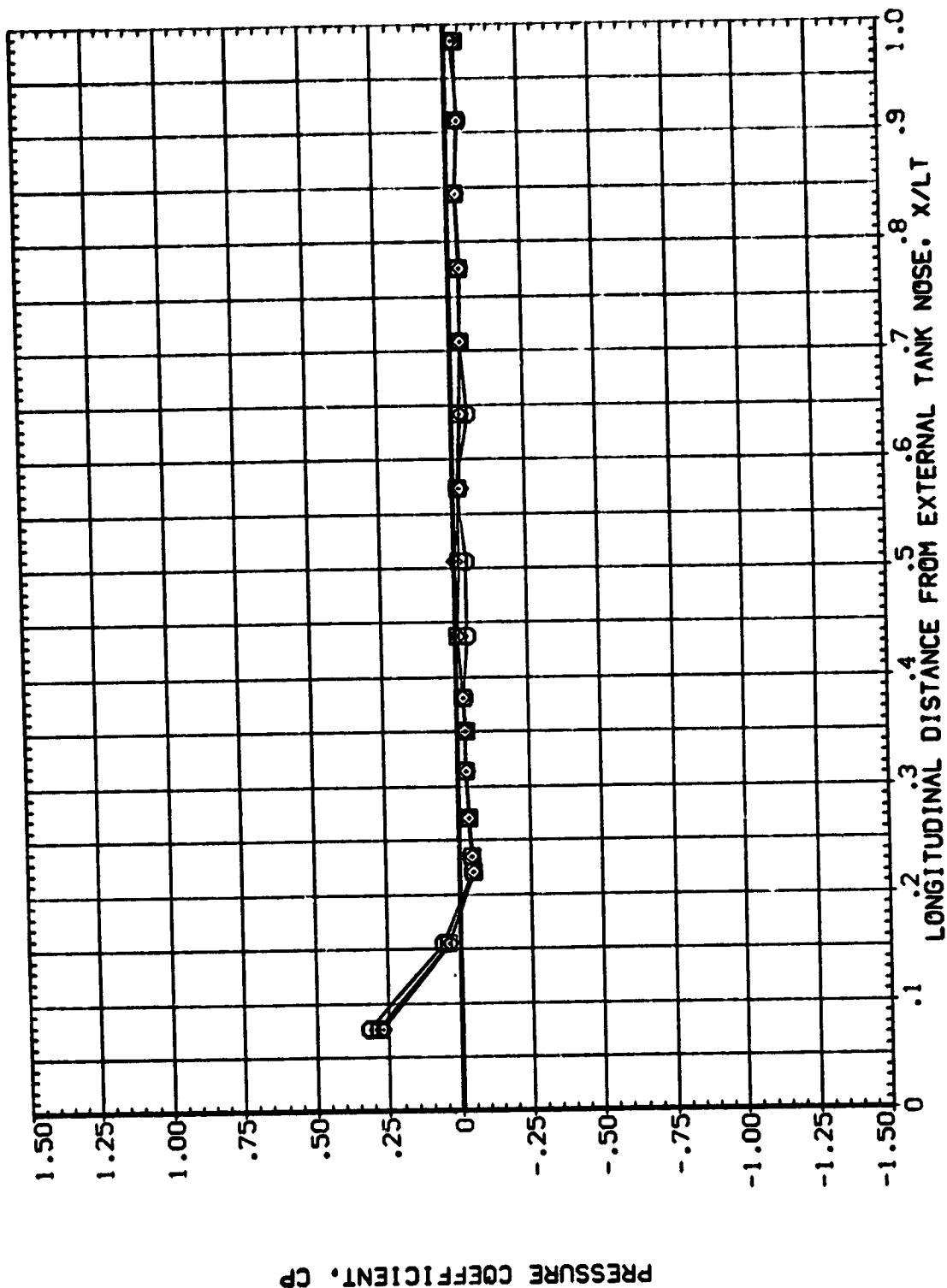
MACH  
 3.480

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

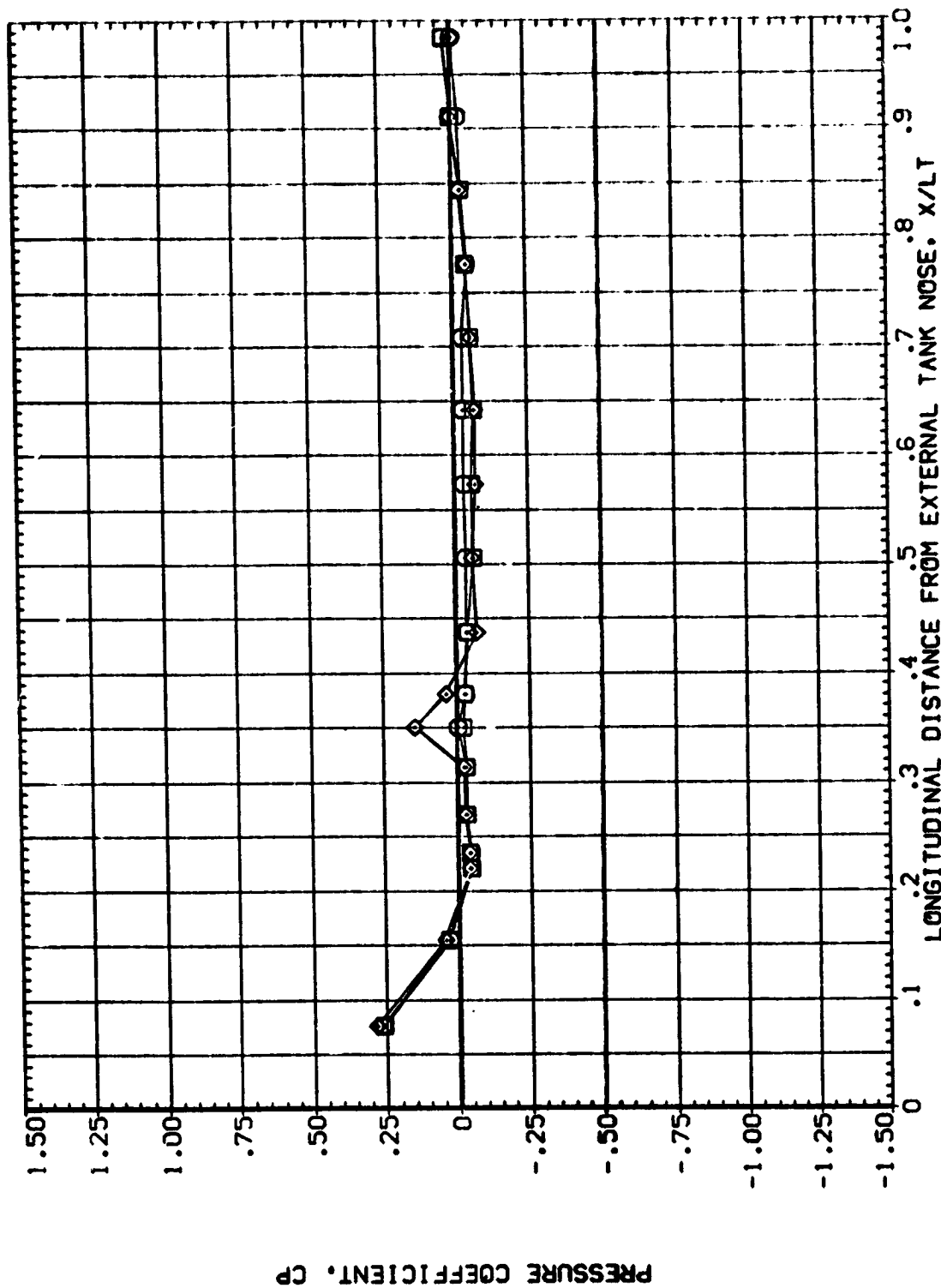
PARAMETRIC VALUES  
 -5.000 CONF15 90.000  
 .14C R-33ER .000  
 .000 OFBINC .50C



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A807C4)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	216.000	-4.000	3.480	SREF 6.198	-5.000
□	234.000			LREF 5.313	.140
◇	252.000			BREF 5.313	.000
				XMRP 2.549	.000
				YMRP .000	.500
				ZMRP .000	
				SO. IN. 50. IN.	
				IN. IN.	
				IN. IN.	
				IN. IN.	
				ALPHA	
				DELTA Z	
				X-S98	
				CONF IG	
				R-DEER	
				OSB INC	

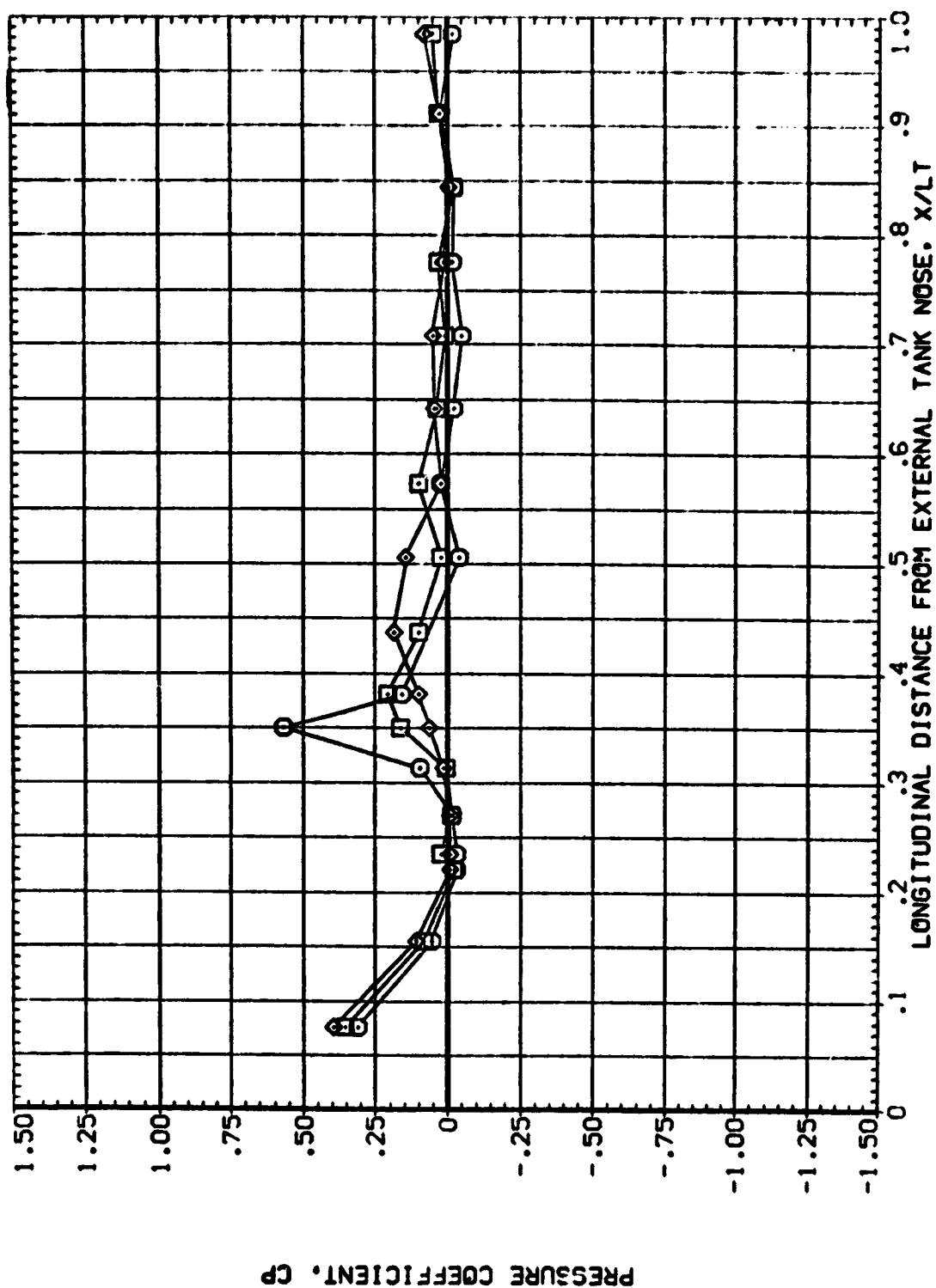


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	270.000	-4.000	3.480	SREF 6.198	-5.000
□	288.000			LREF 5.313	.000
◇	306.000			BREF 5.313	.140
				XREF 2.549	.000
				YREF .000	.000
				ZREF .000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82TC4)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 324.000  
 342.000  
 360.000

BETA  
 -4.000

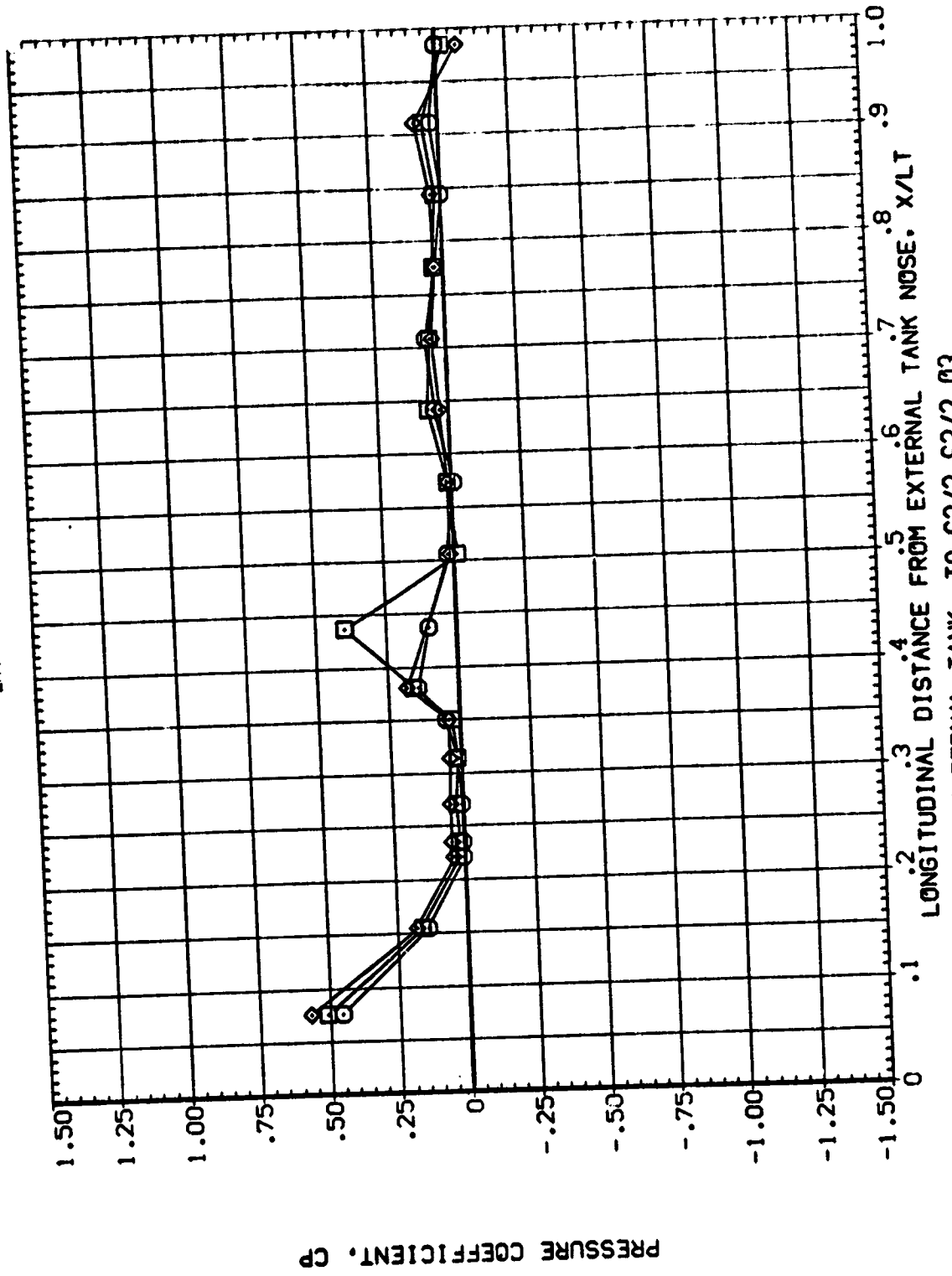
MACH  
 3.480

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI .000  
 18.000  
 36.000

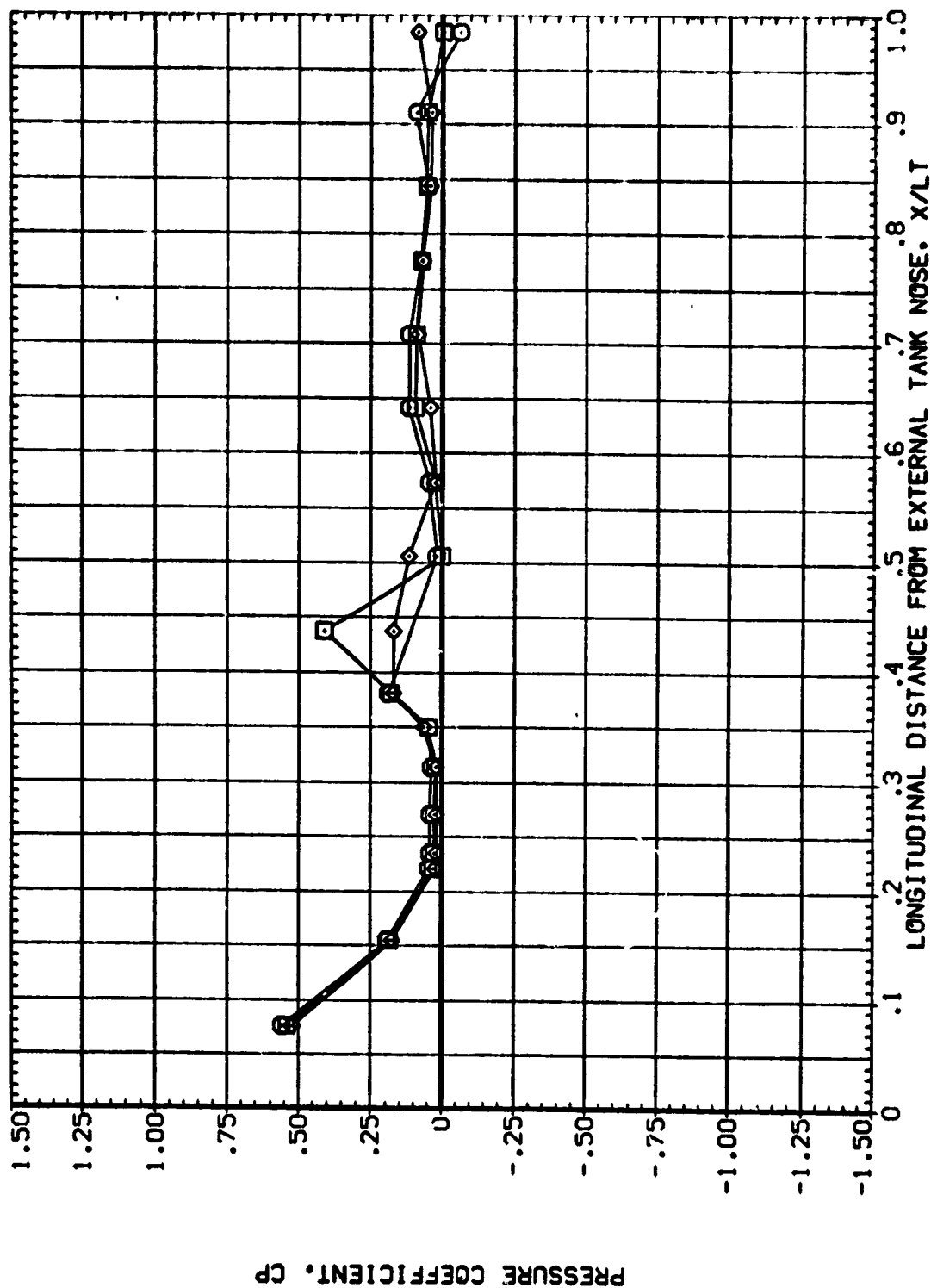
BETA .000

MACH 3.480

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000  
 .500

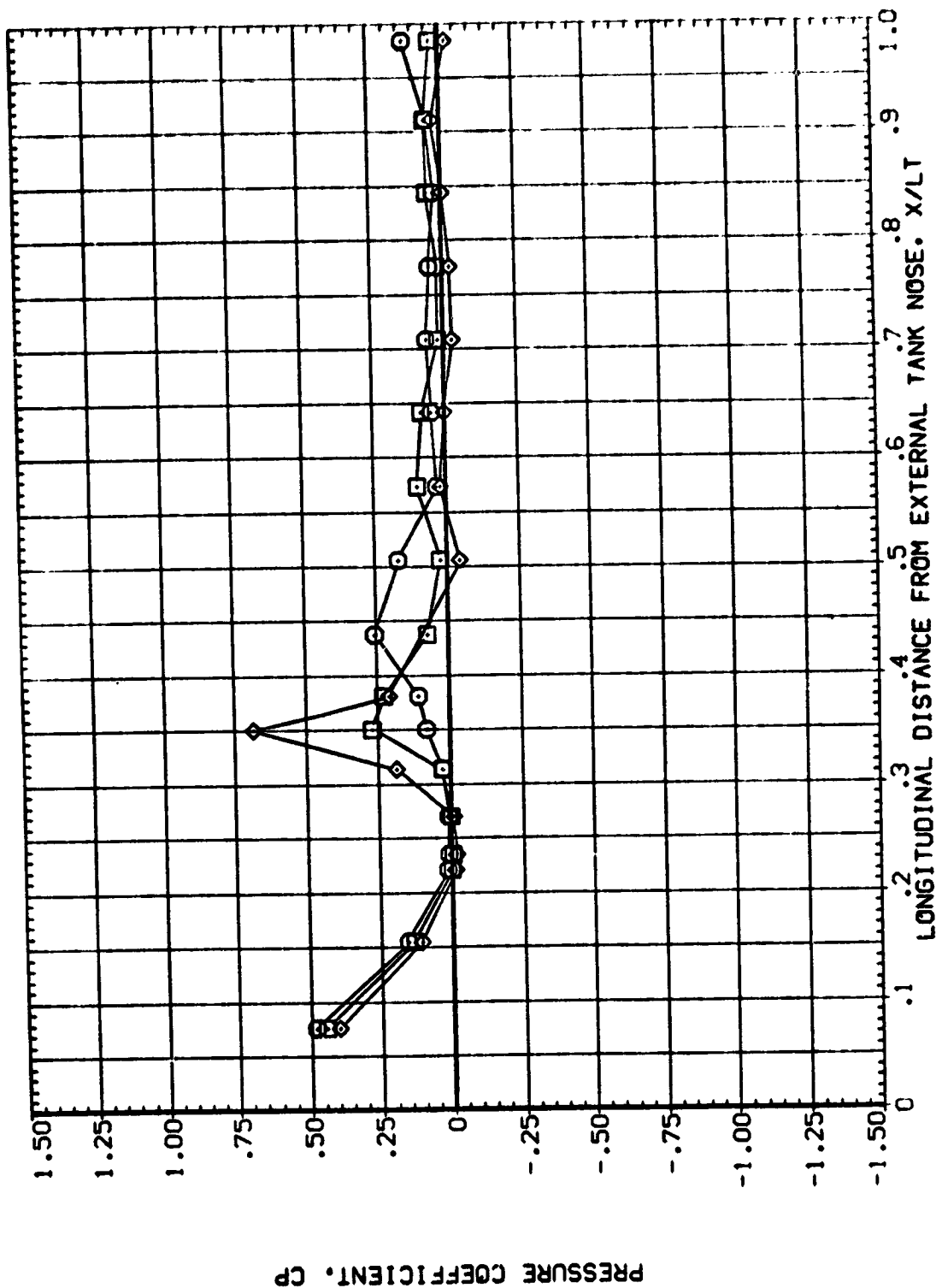
CONF IG  
 RLODER  
 ORBINC  
 DELTA Z  
 X-SRS



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T14)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
	54.000	72.000	.000	.000	3.480	3.480	SREF	6.198	50. IN.	DELTA Z	-5.000	CONF IG
○	72.000						LREF	5.313	IN.		.140	ROTOR
□	90.000						BREF	5.313	IN.	X-SRB	.000	ORB INC
◇							XMRP	2.549	IN.			
							ZMRP	.000	IN.			

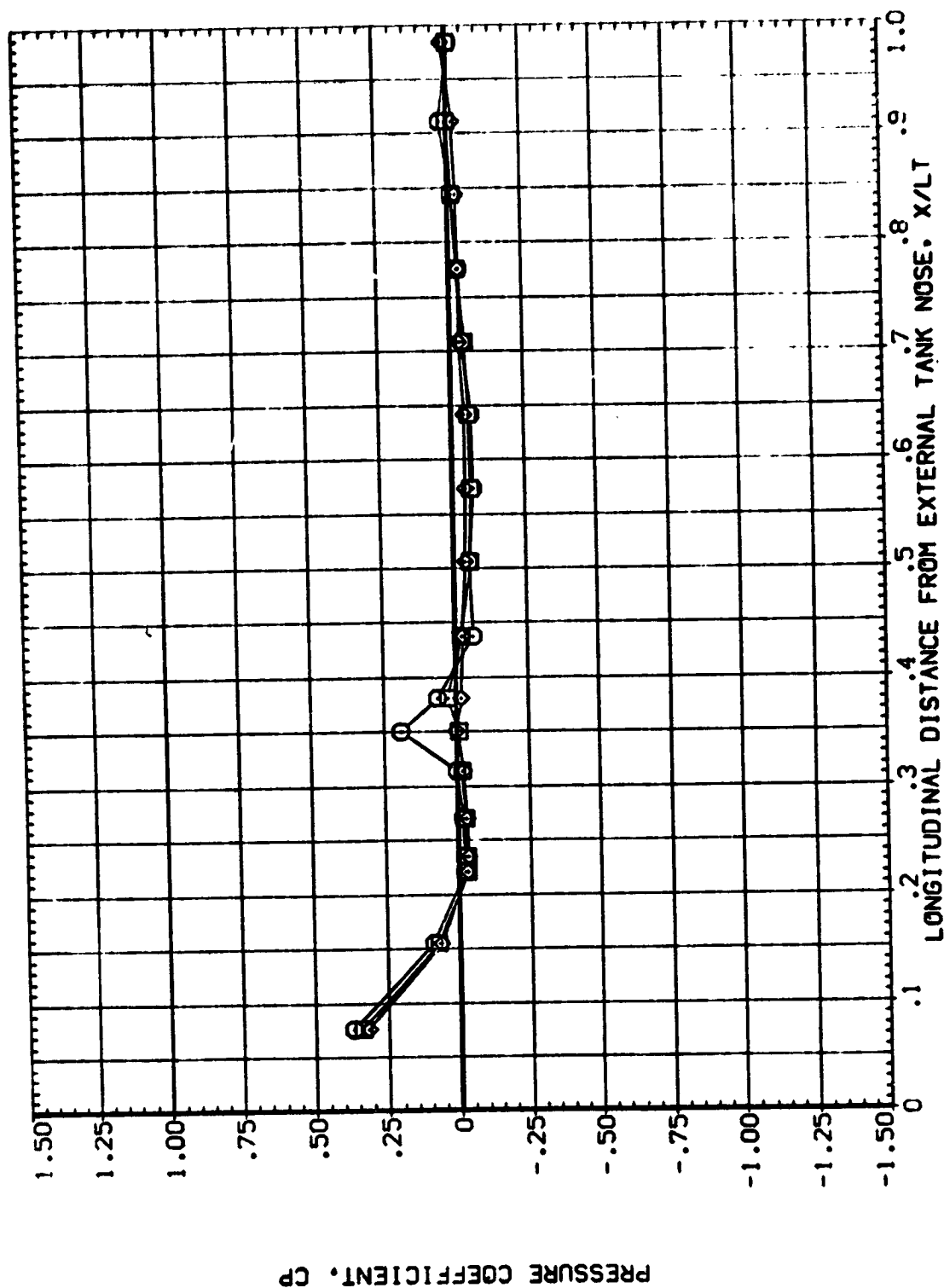


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	108.000	126.000			SREF	LREF	BREF	XMRP	SO, IN.	ALPHA	CONF IG	SC, DEG
□	108.000	126.000	.000	3.480	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
◇	144.000				2.000	.000	.000	.000	IN.	X-SRB	SRB INC	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇

PHI 162.000  
 180.000  
 198.000

BETA .000

MACH 3.480

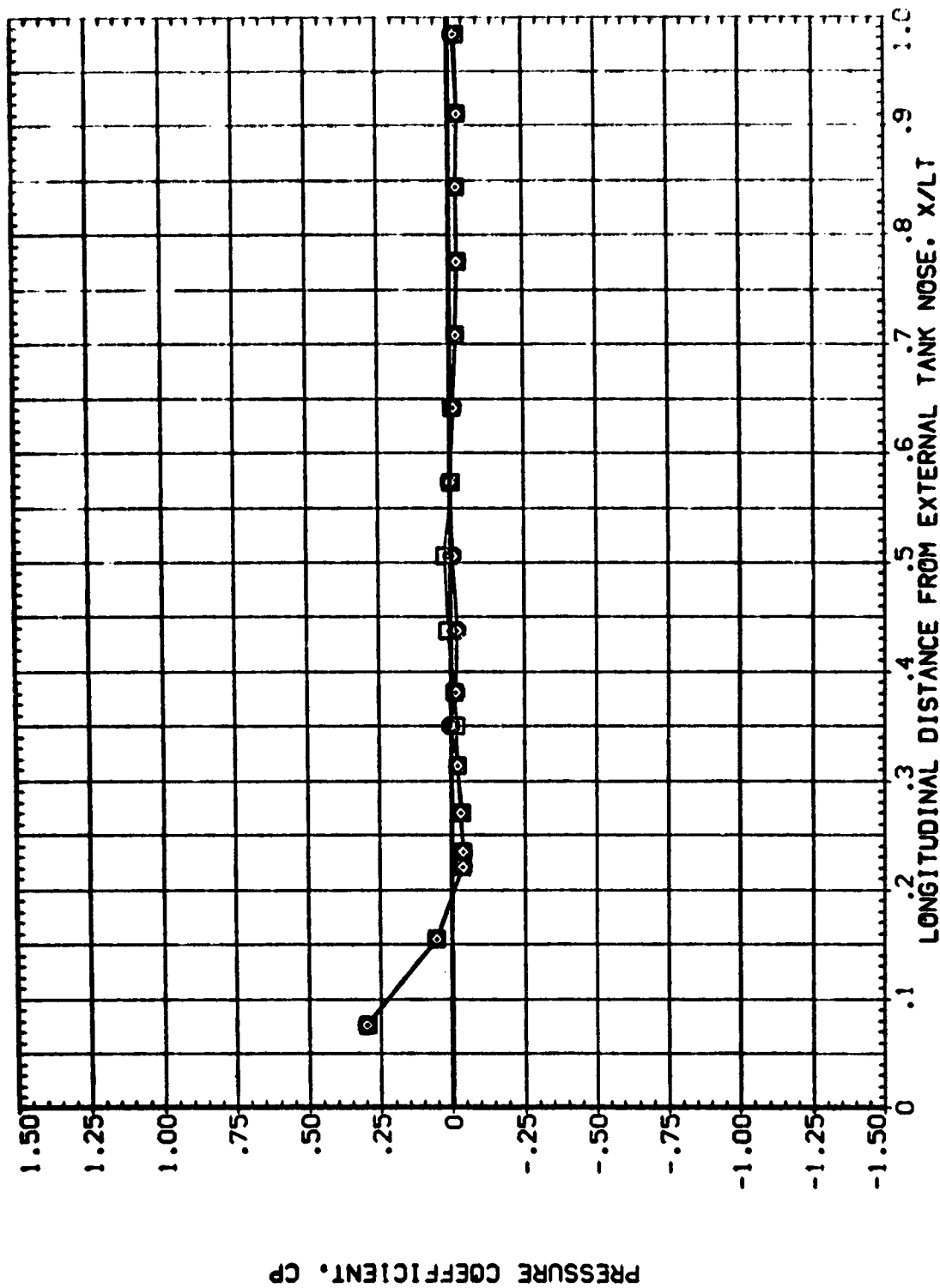
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000

90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



SYMBOL	PHI	BETA	MACH	REFERENCE DATA	SO. IN.	PARAMETER VALUES
○	216.000	.000	3.480	SREF 6.199	IN.	ALPHA 5.000
□	234.000			LSREF 5.313	IN.	CONFUS 1.140
◇	252.000			BSREF 5.313	IN.	RUCER .000
				XMRP 2.549	IN.	OSGINC .500
				YMRP .000	IN.	
				ZMRP .000	IN.	

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
○  
□  
◇

PHI  
270.000  
288.000  
306.000

BETA  
.000

MACH  
3.480

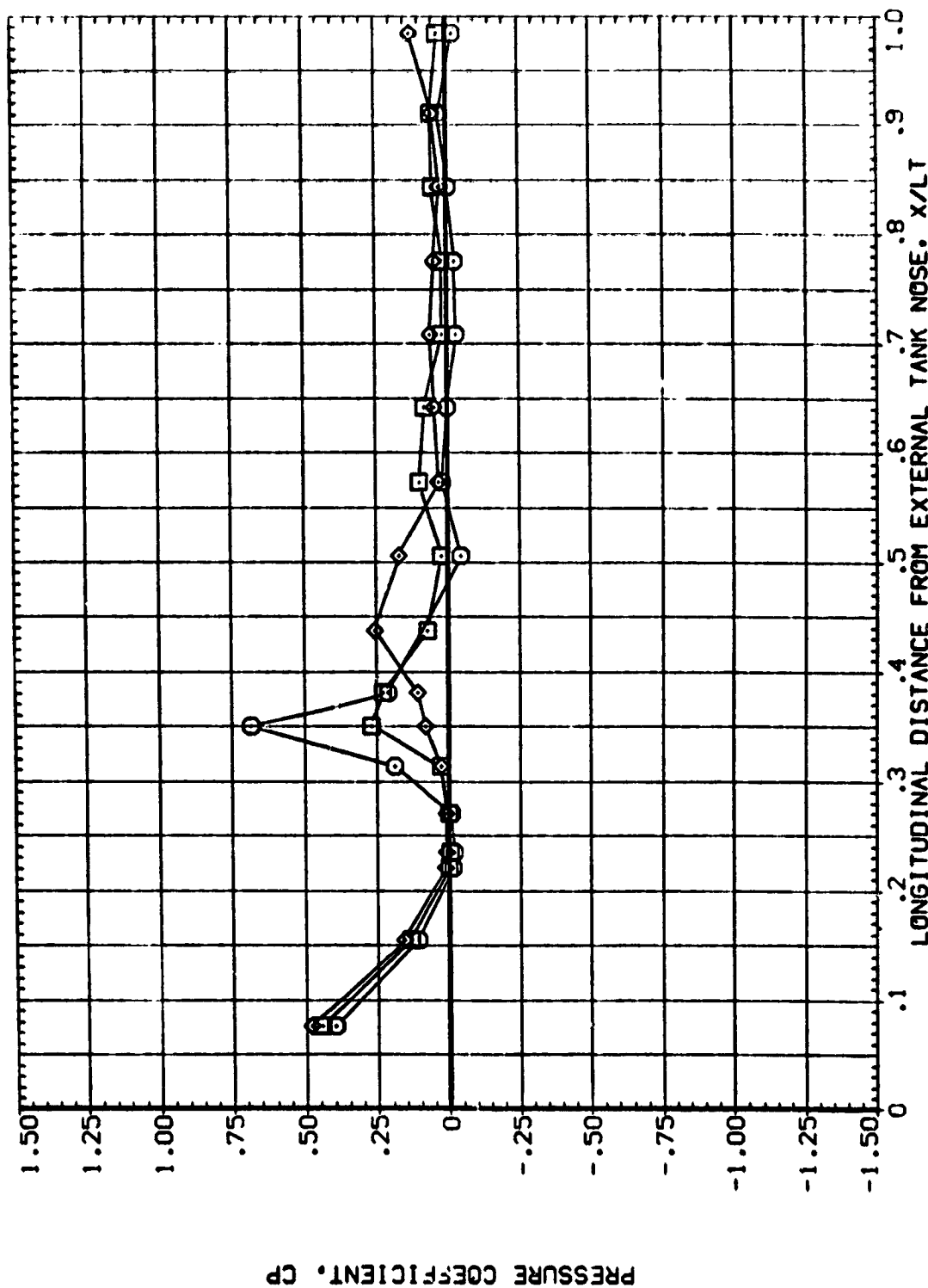
REFERENCE DATA  
SREF 5.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
-5.000  
.140  
.000  
CONFIG  
RUDDER  
NOSE

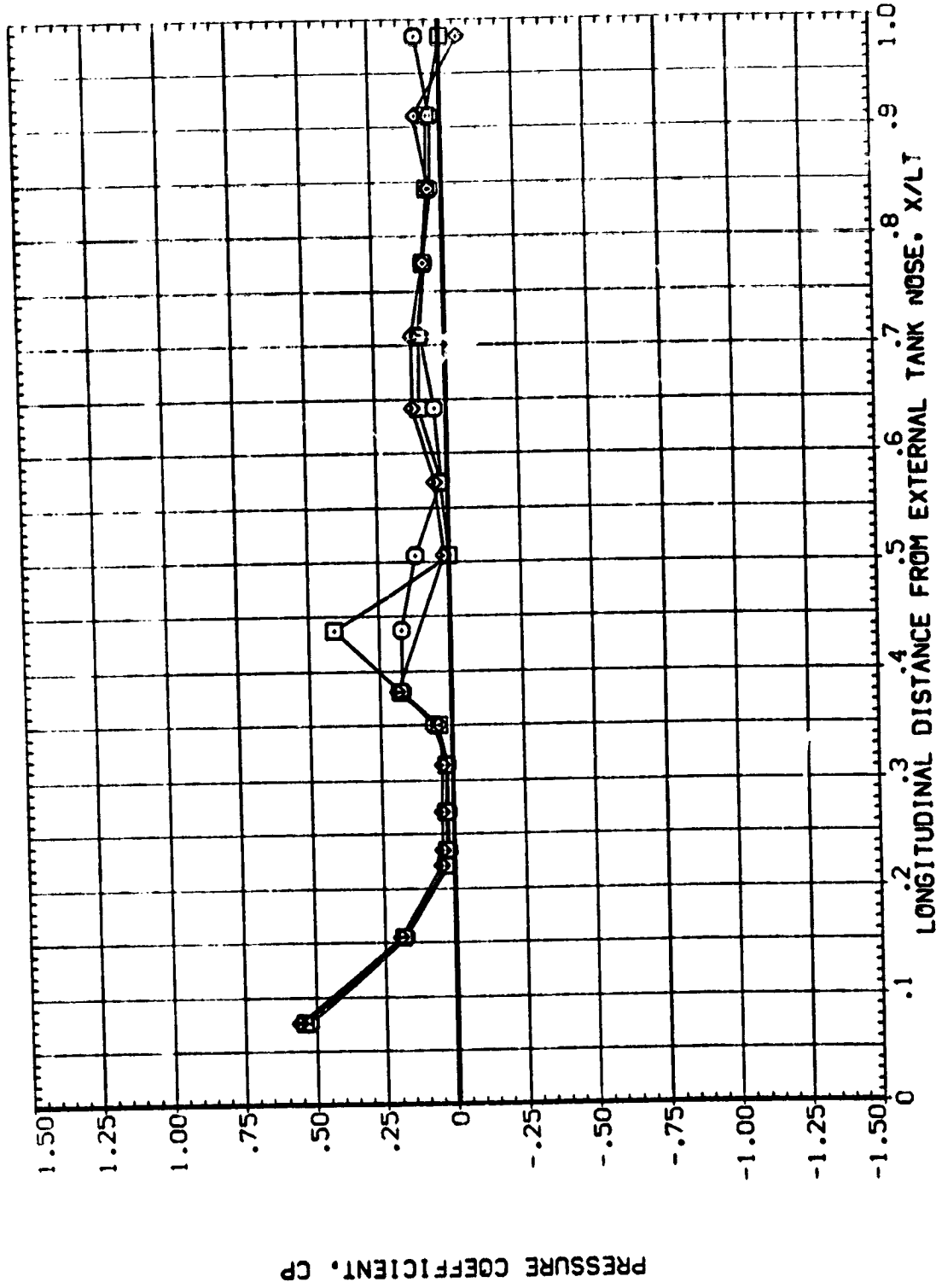
90.000  
.000  
.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

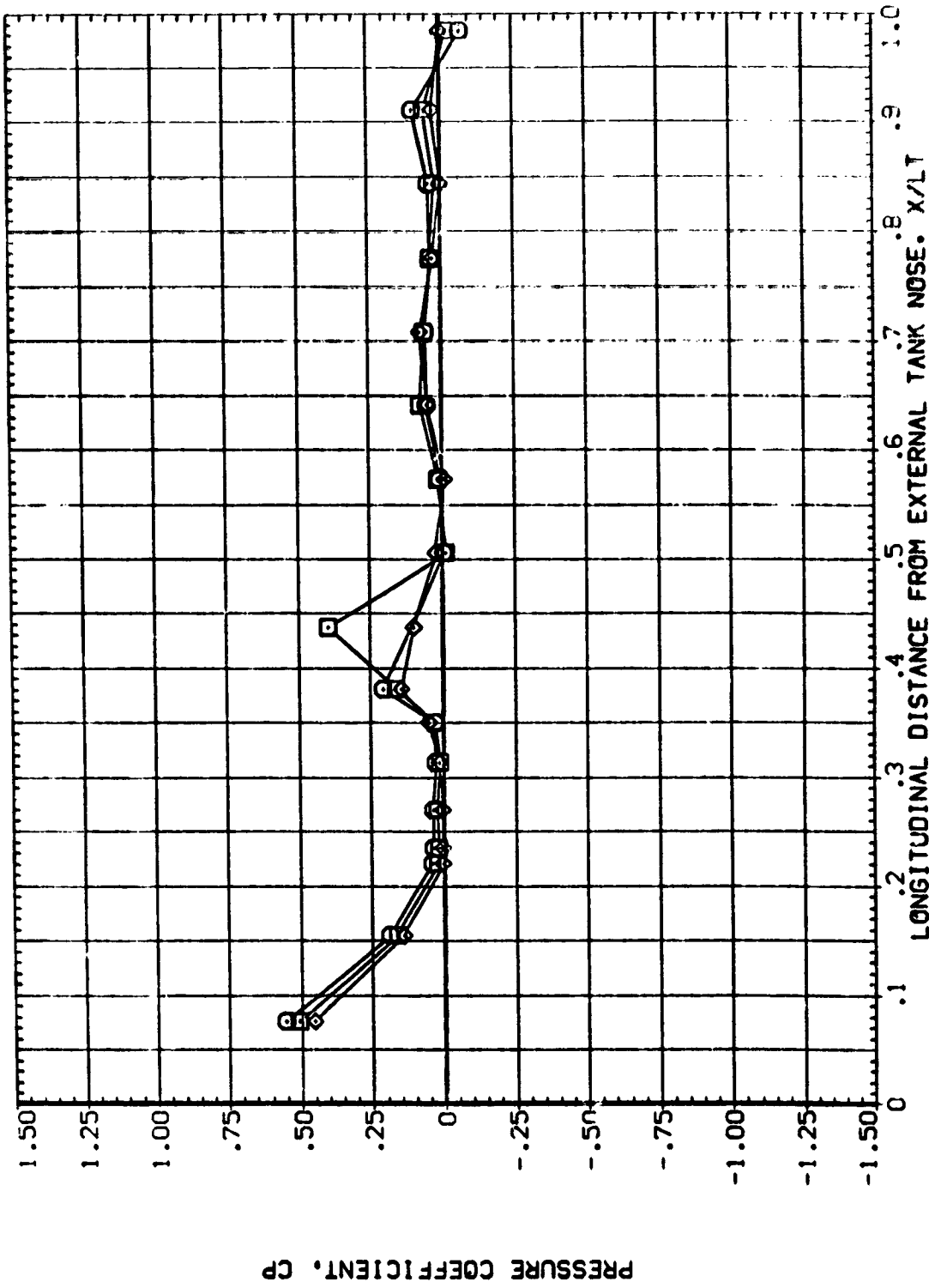
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IG	
□	324.000	.000	3.480	LREF	IN.	CONF IG	90.000
◇	342.000			BREF	IN.	R. ORDER	.000
◇	360.000			XMRP	IN.	CRB INC	.500
				ZMRP	IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

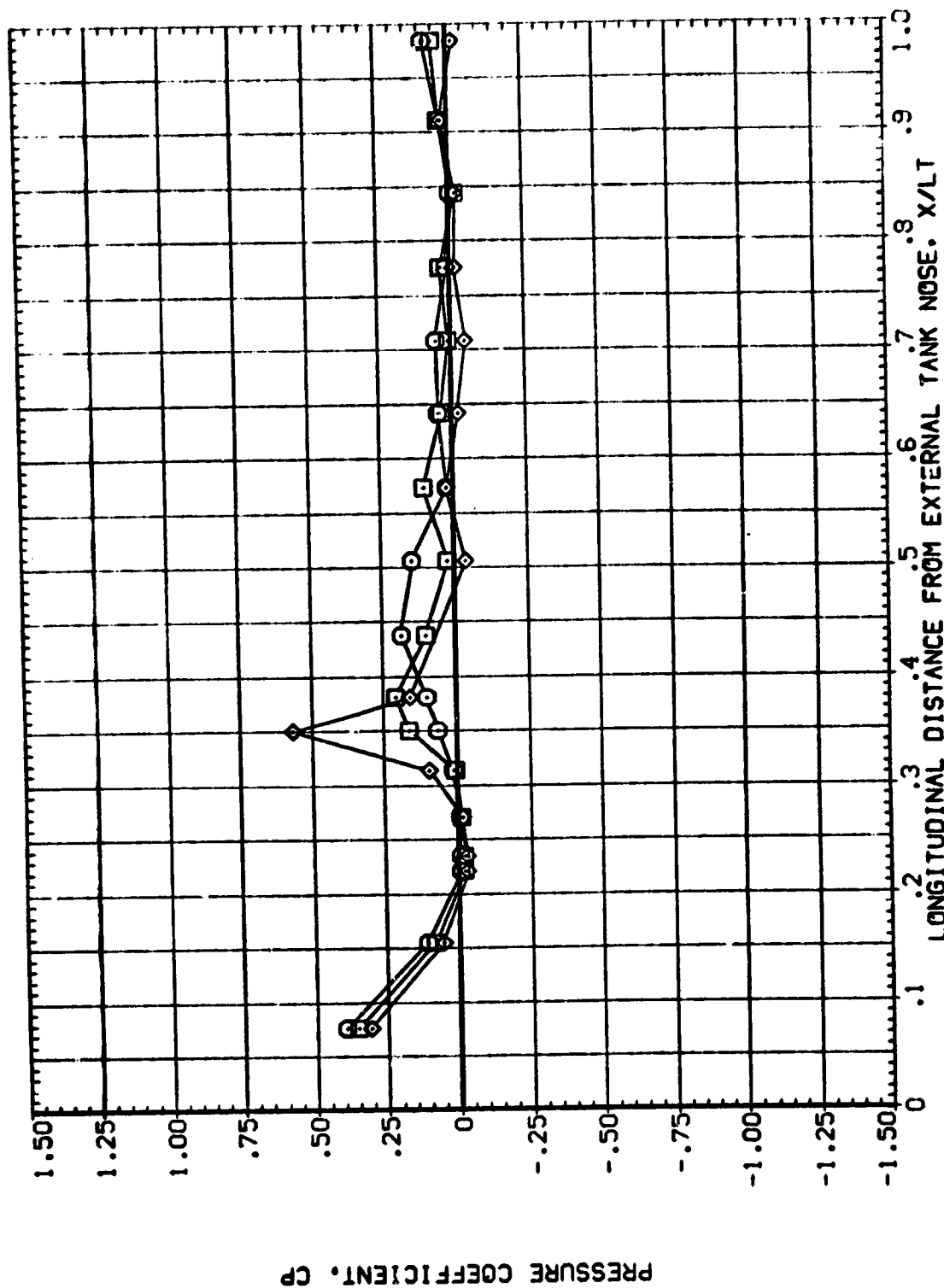
SYMBOL		PHI		BETA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
◇		.000		4.000		3.480		SREF	6.198	-5.000	CDX IS
□		18.000						LPREF	5.313	.140	RUOKER
◇		36.000						BREF	5.313	.000	ORBITING
								YMRP	2.549		
								ZMRP	.000		
											50.000
											.000
											.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 537(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

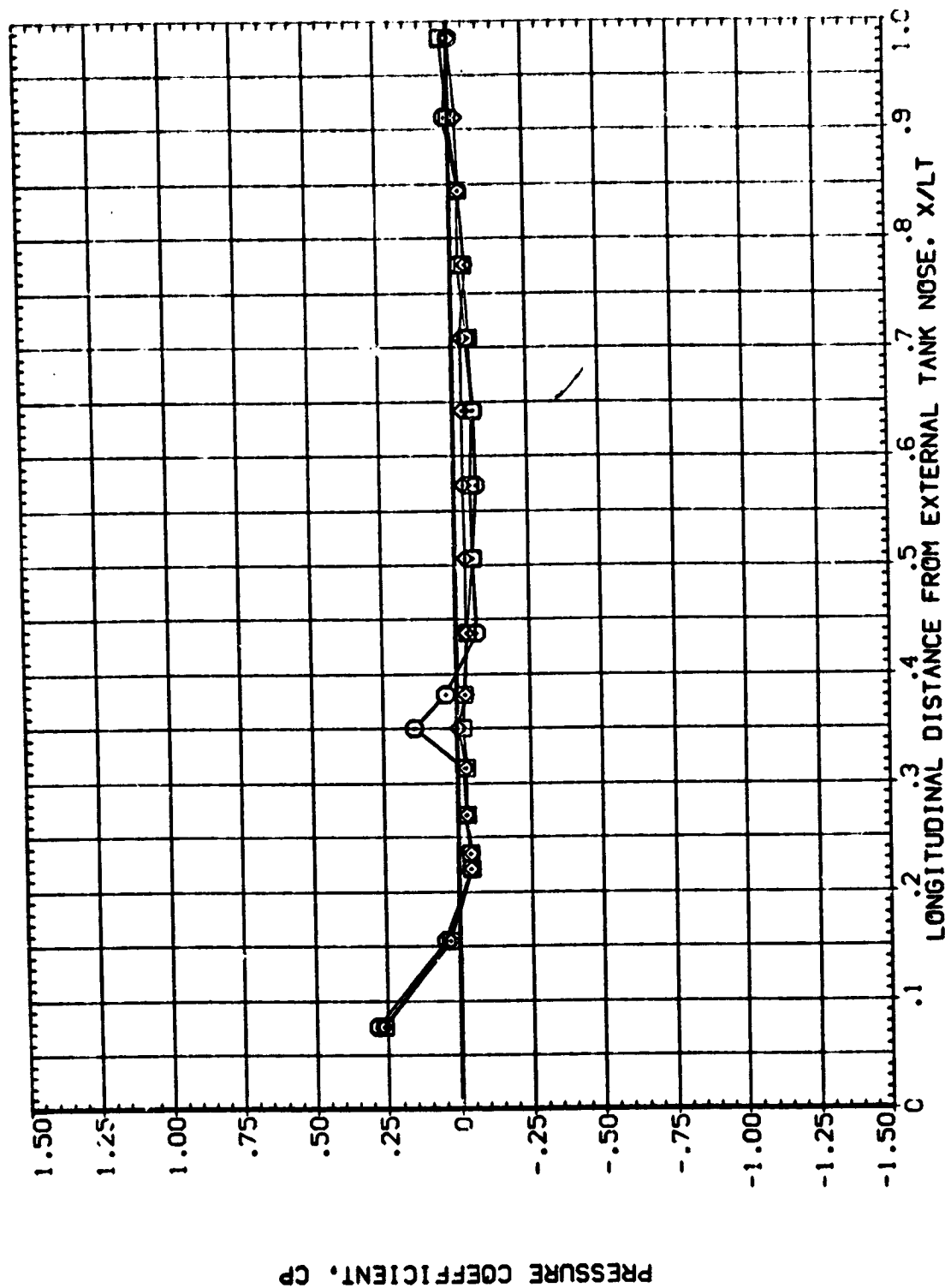
SYMBOL	F <sub>TH</sub>	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IS	CONF IS
○	54.000	4.000	3.480	LREF	5.313	DELTA Z	R00ER
□	72.000			BREF	5.313	.140	.000
◇	90.000			YMRP	2.549	X-SRS	ORRINC
				ZMRP	.000		.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

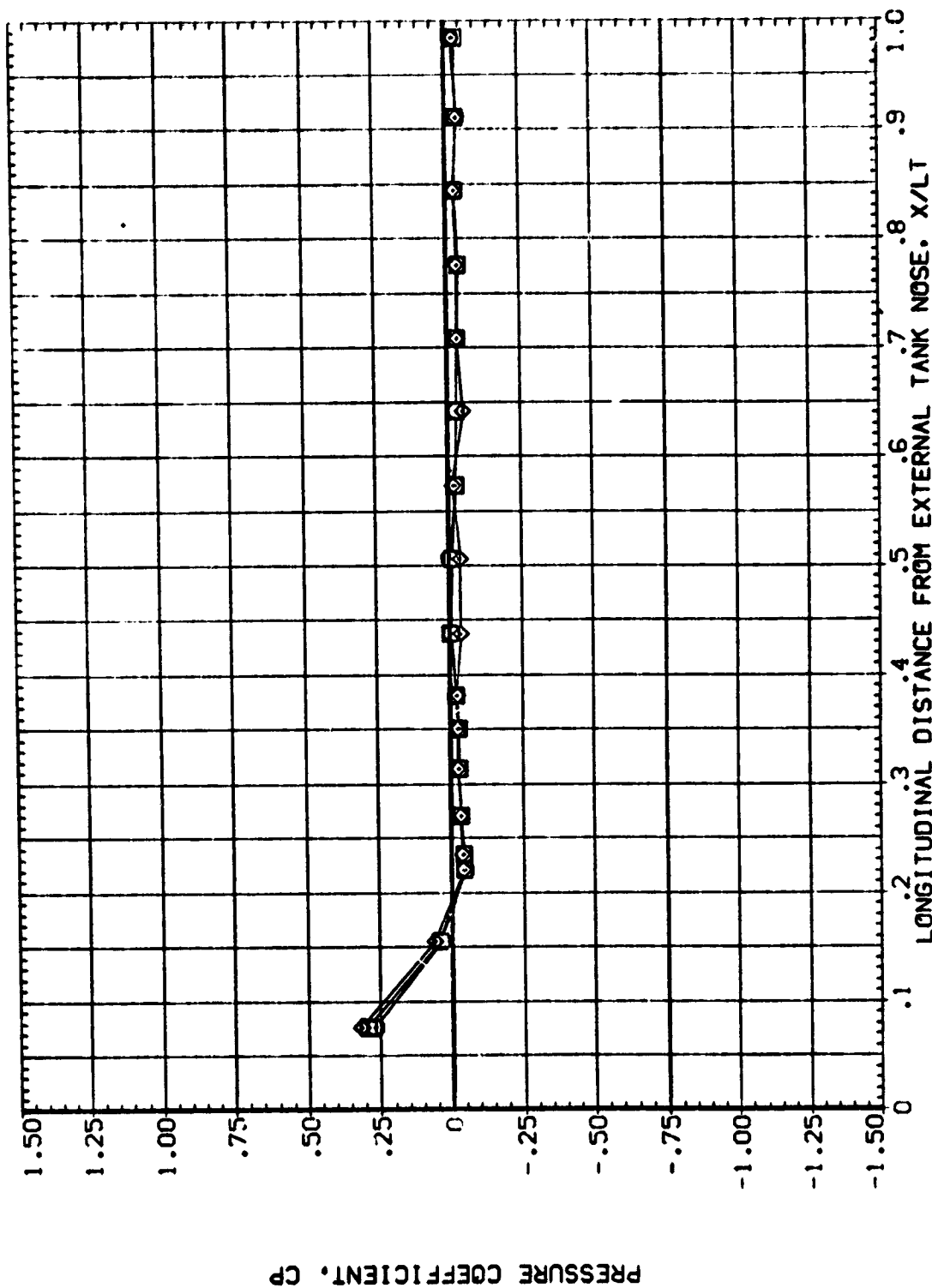
SYMBOL	REFERENCE DATA		PARAMETRIC VALUES	
	PHI	BETA	MACH	ALPHA
□	108.000	4.000	3.480	-5.000
◇	126.000			.140
◇	144.000			.000
				.000
				.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

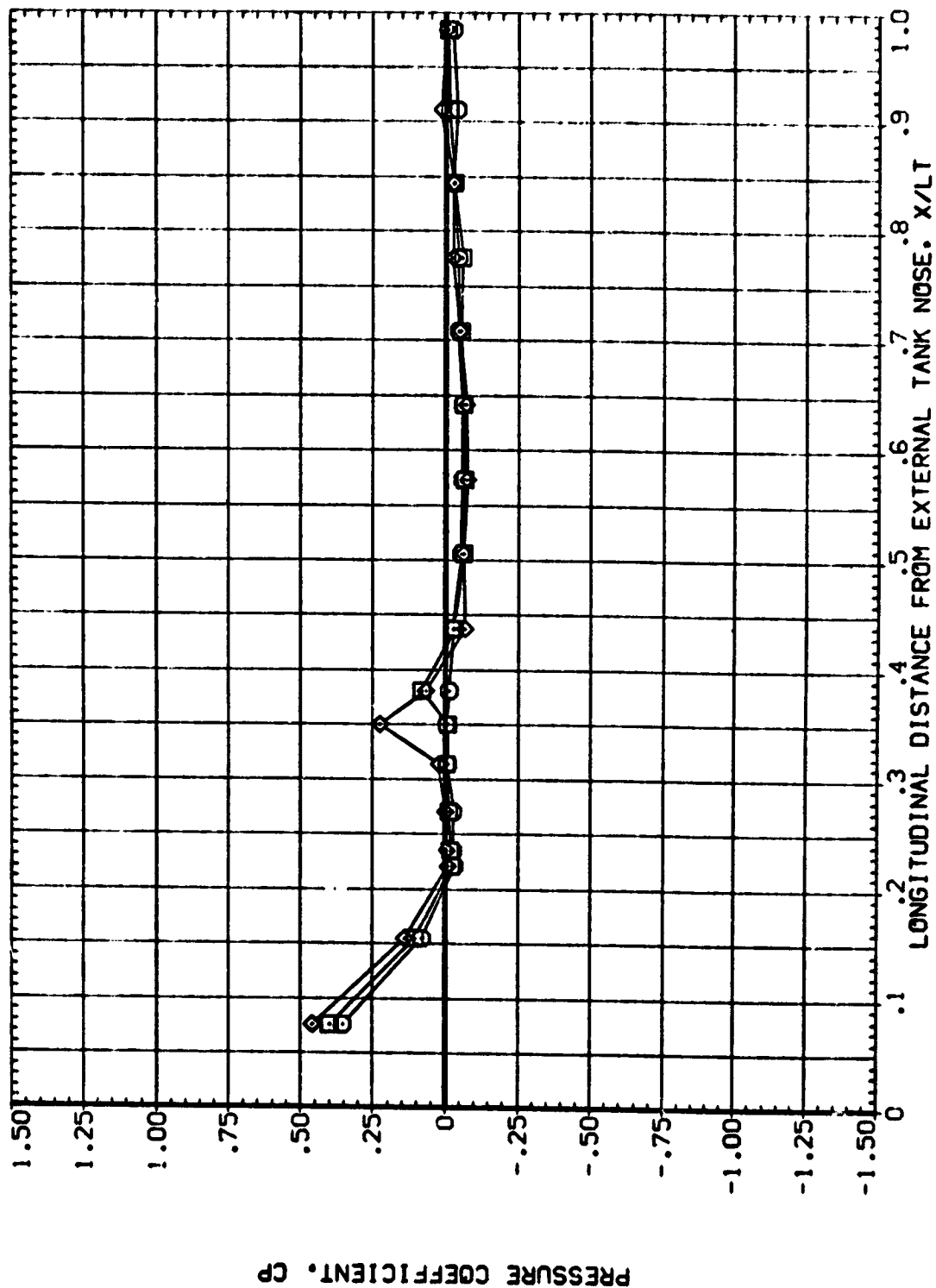
SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	162.000	180.000	4.000	3.480	SREF	6.198	50. IN.	ALPHA	-5.000	CONF'G	50.000	
□	162.000	180.000	4.000	3.480	LREF	5.313	IN.	DELTA Z	.140	RUDER	.000	
◇	198.000	198.000			BREF	5.313	IN.	X-SRB	.000	DRBINC	.500	
					VMRP	2.549	IN.					
					VMRD	.000	IN.					
					ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82104)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	SO. IN.	ALPHA	CONFIG	90.000
□	216.000	4.000	3.480	LREF	5.313	IN.	DELTAZ	RLODER	.000
□	234.000			BREF	5.313	IN.	X-SRB	ORLINE	.500
○	252.000			XMRP	2.549	IN.			
				YMRP	.000	IN.			
				ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



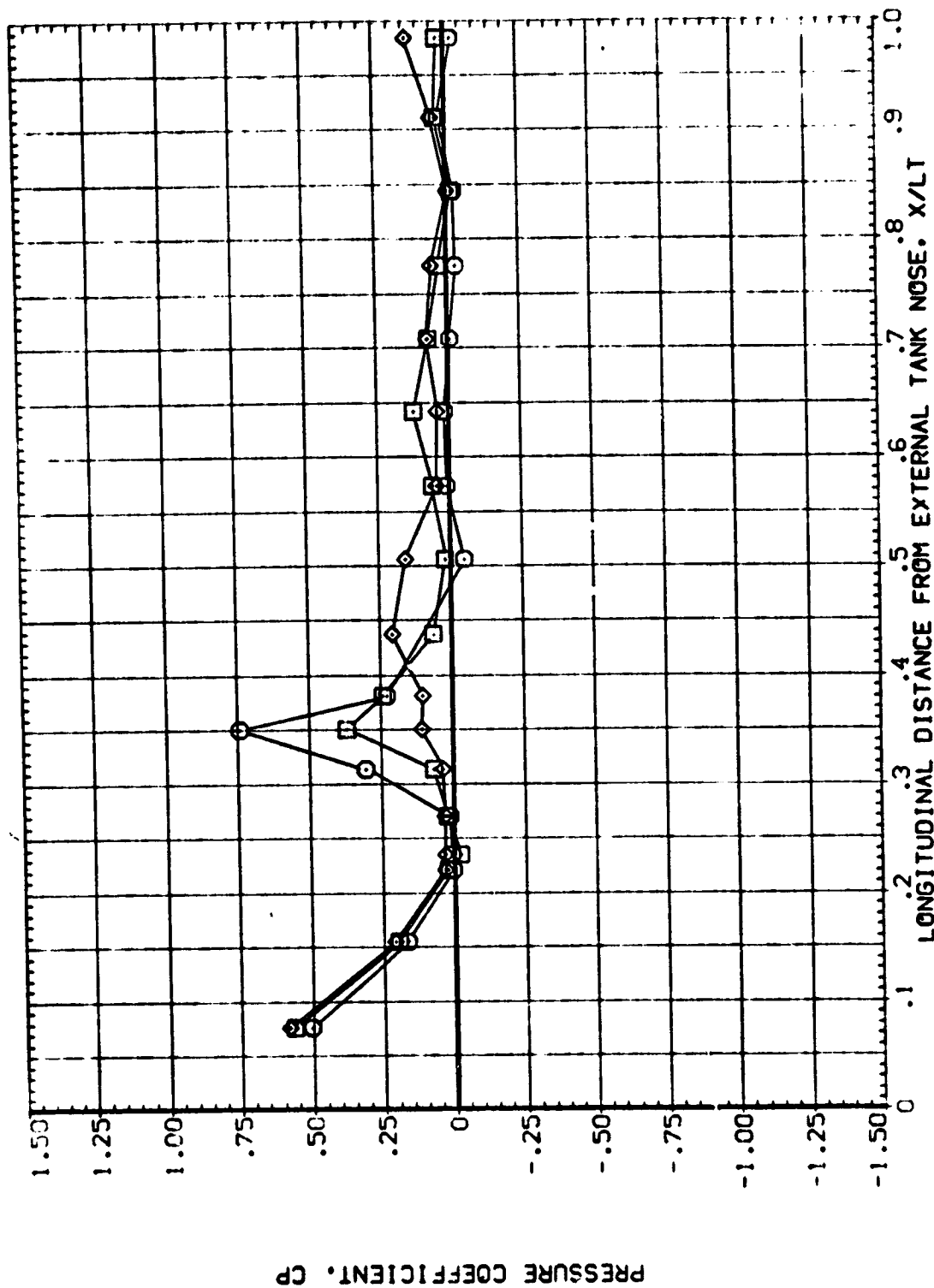
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

PHI  
270.000  
268.000  
306.000

BETA  
4.000  
3.480

REFERENCE DATA  
SREF 6.198 SQ. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

PARAMETRIC VALUES  
ALPHA  
DELTAZ  
N-SPB  
-5.000  
.140  
.000  
999.999  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 □  
 ◇

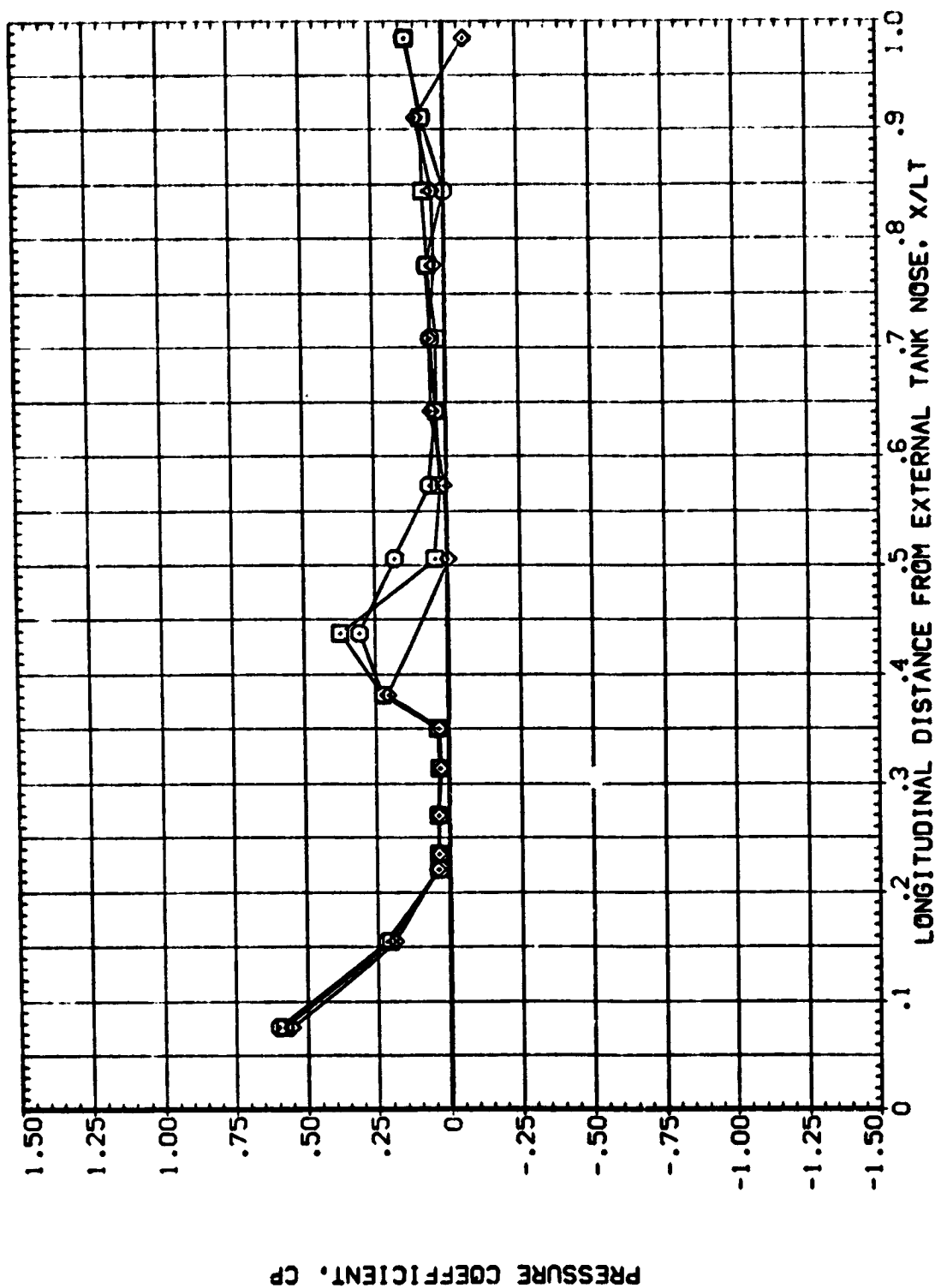
PHI 324.000  
 342.000  
 360.000

BETA 4.000

MACH 3.480

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 YMRP 2.549 IN.  
 ZMRP .000 IN.

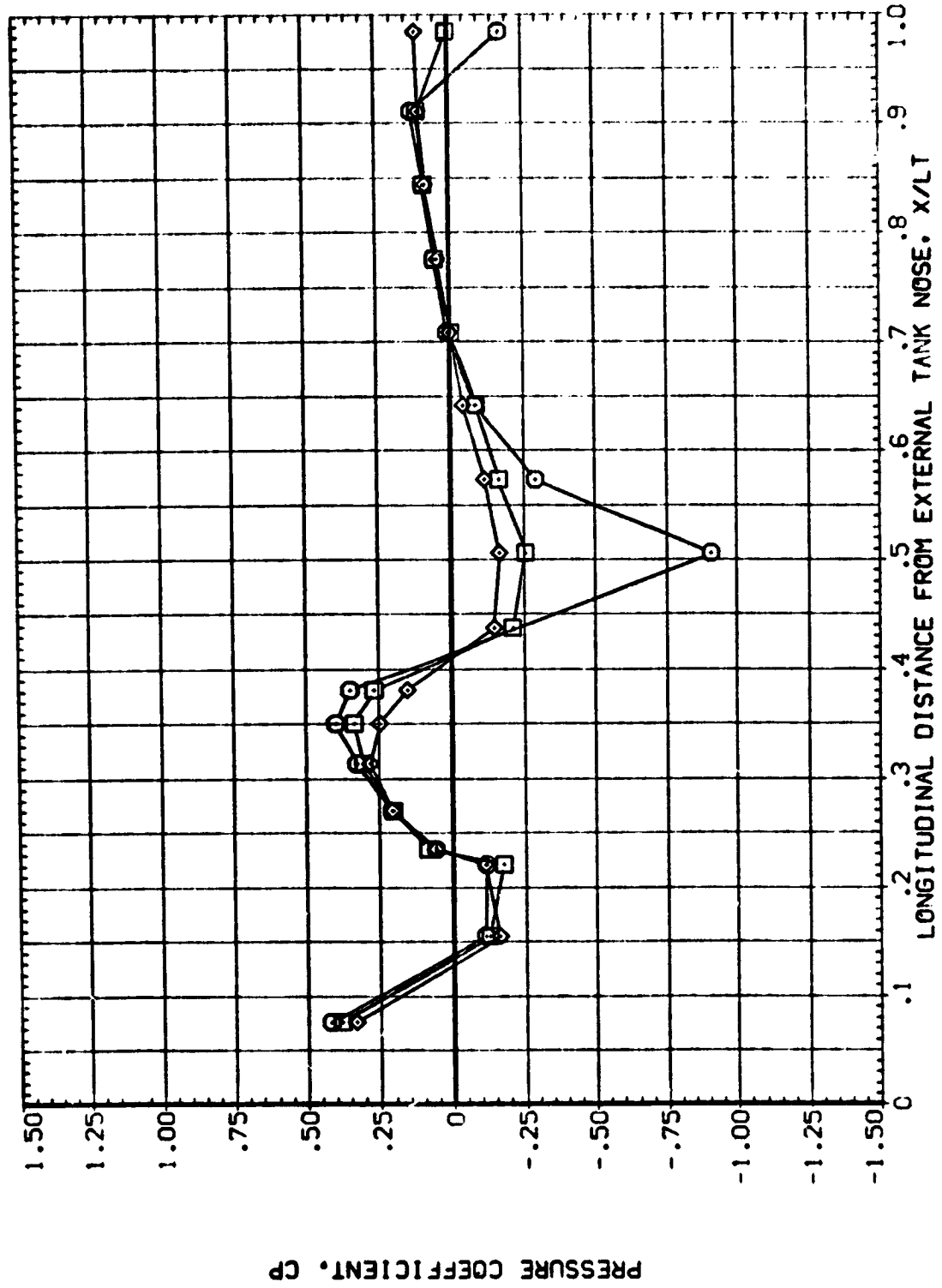
PARAMETRIC VALUES  
 -5.000 CONF IG  
 .14C RUDER  
 .000 ORBING



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

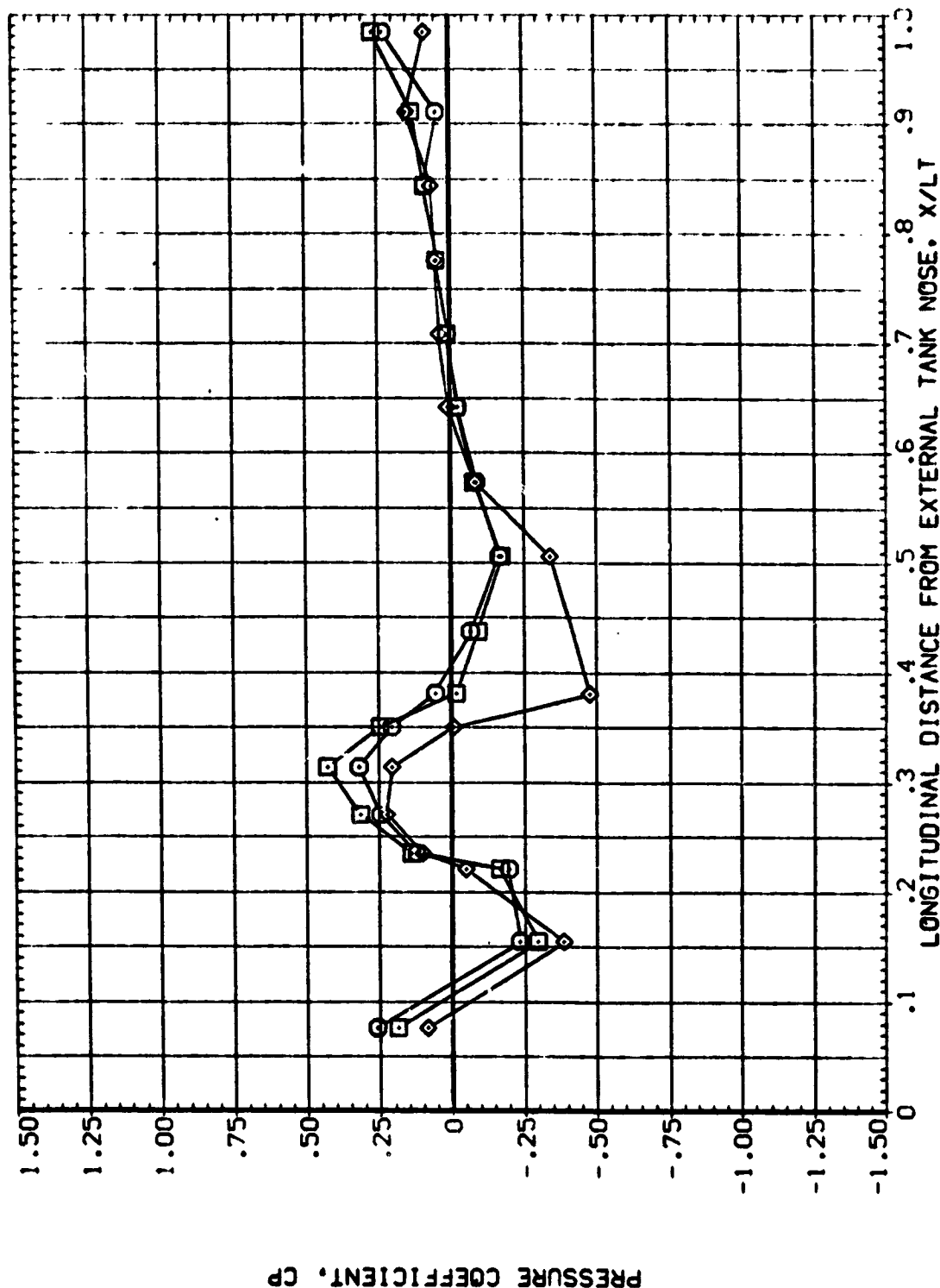
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	LRREF	XRREF	BETA	CLYGT	ORINC
○	.000	-9.000	.900	6.198	5.313	2.542	DELTAZ	.000	.000
□	18.000			5.313	5.313	2.542	N-508	.140	.000
◇	36.000			2.542	2.542	2.542		.000	.500
				1.000	1.000	1.000			
				.000	.000	.000			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL		REFERENCE DATA		PARAMETRIC VALUES			
PHI	54.000	SREF	6.199	BETA	.000	CONV TS	90.000
	72.000	LREF	5.313	DELTA Z	.140	SLIDER	.000
	90.000	BREF	5.313	A-SRB	.000	OSB INC	.500
		XMRP	2.549				
		YMRP	.000				
		ZMRP	.000				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 □  
 ◇

PHI 108.000  
 126.000  
 144.000

ALPHA -8.000

MACH .900

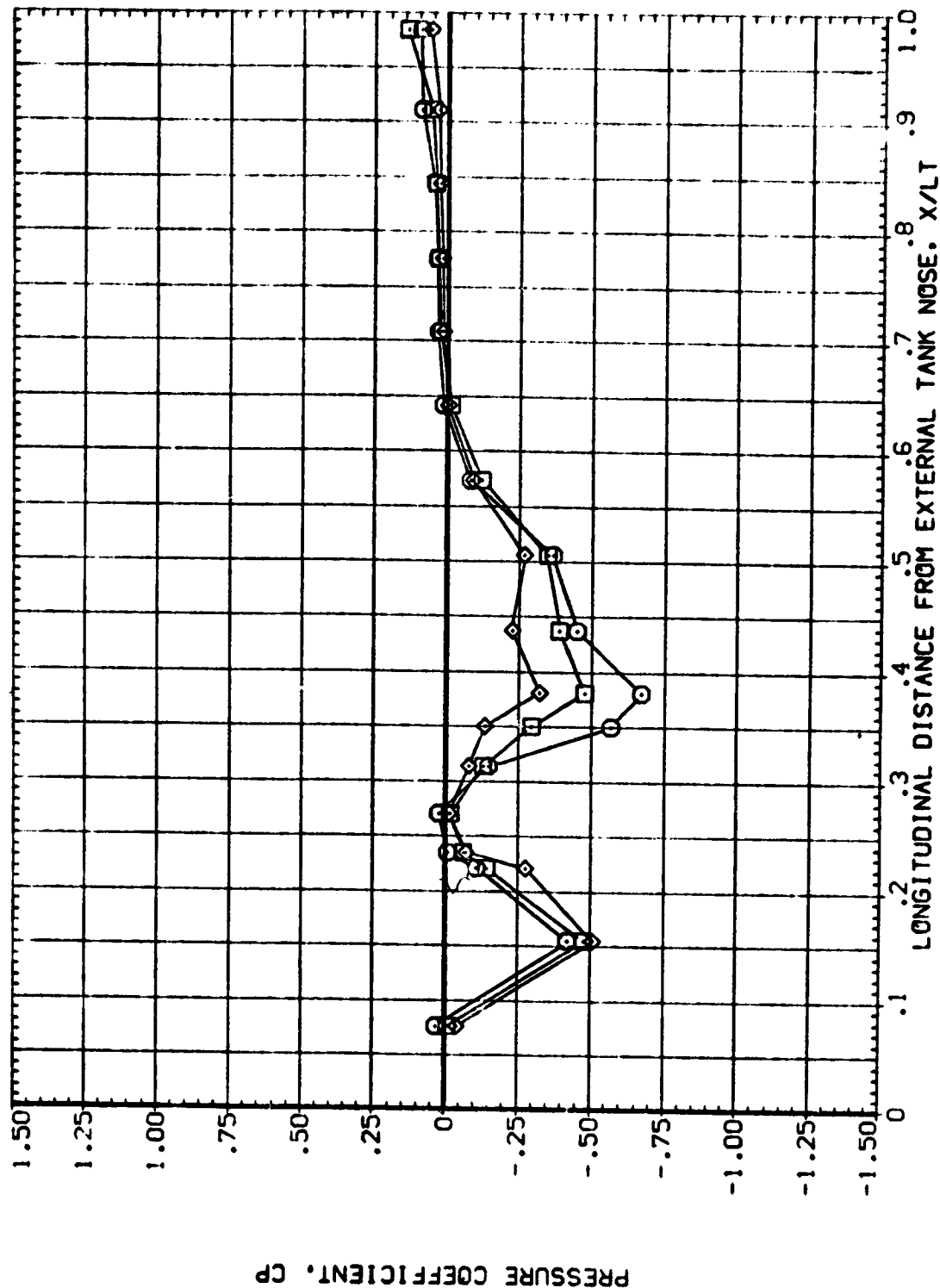
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.548  
 YMRP .000  
 ZMRP .000

SO. IN. 50. IN.  
 IN. IN.  
 IN. IN.

RETA  
 DELTA  
 X-SRB

PARAMETRIC VALUES  
 .000  
 .140  
 .000  
 .000  
 .500

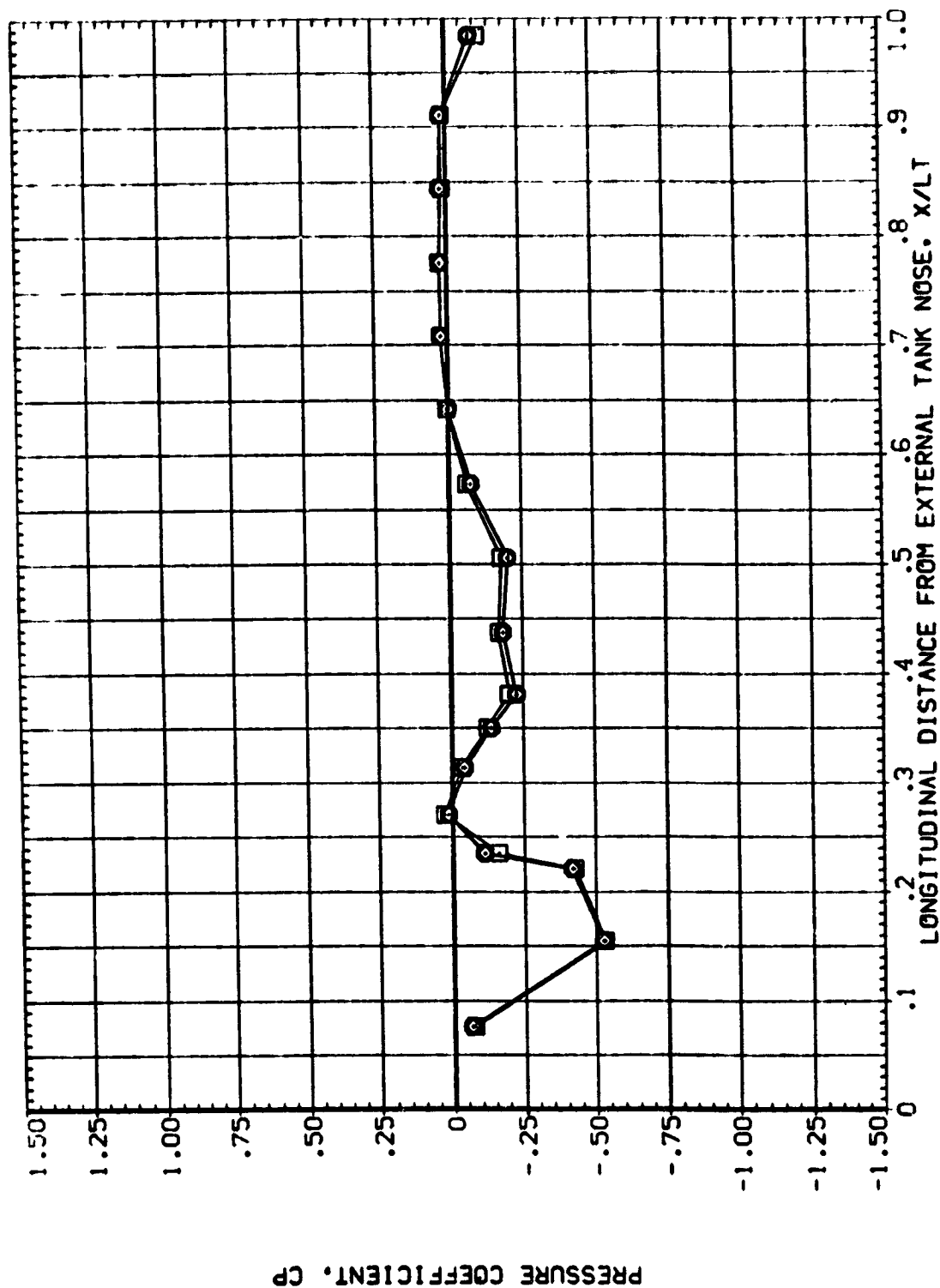
90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

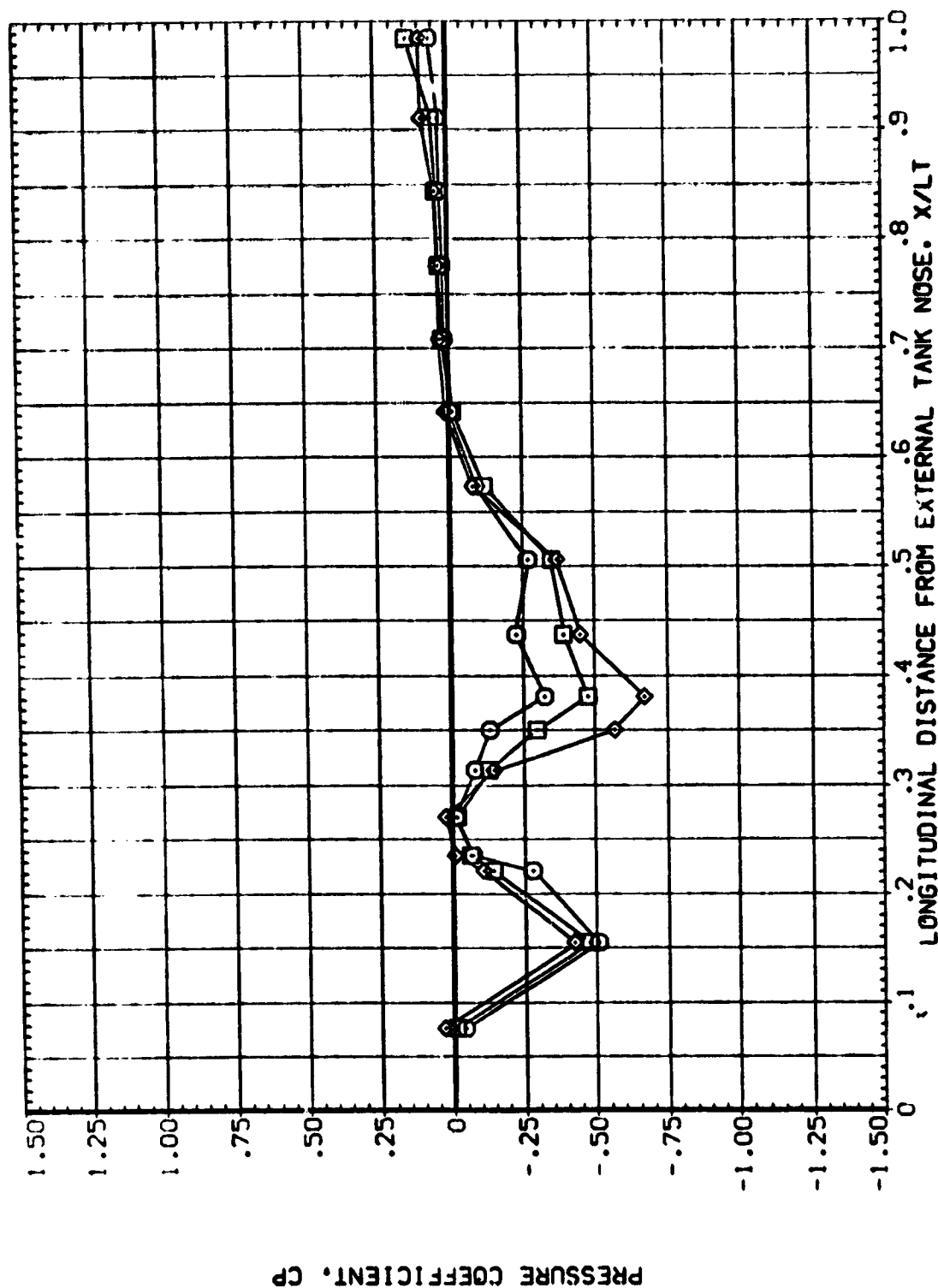
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONFIG	90.000
□	162.000	-8.000	.900	5.198	5.313	5.313	2.549	IN.	DELTA Z	R-000	.000
◇	180.000							IN.	X-SRB	ORBIT	.500
◇	198.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

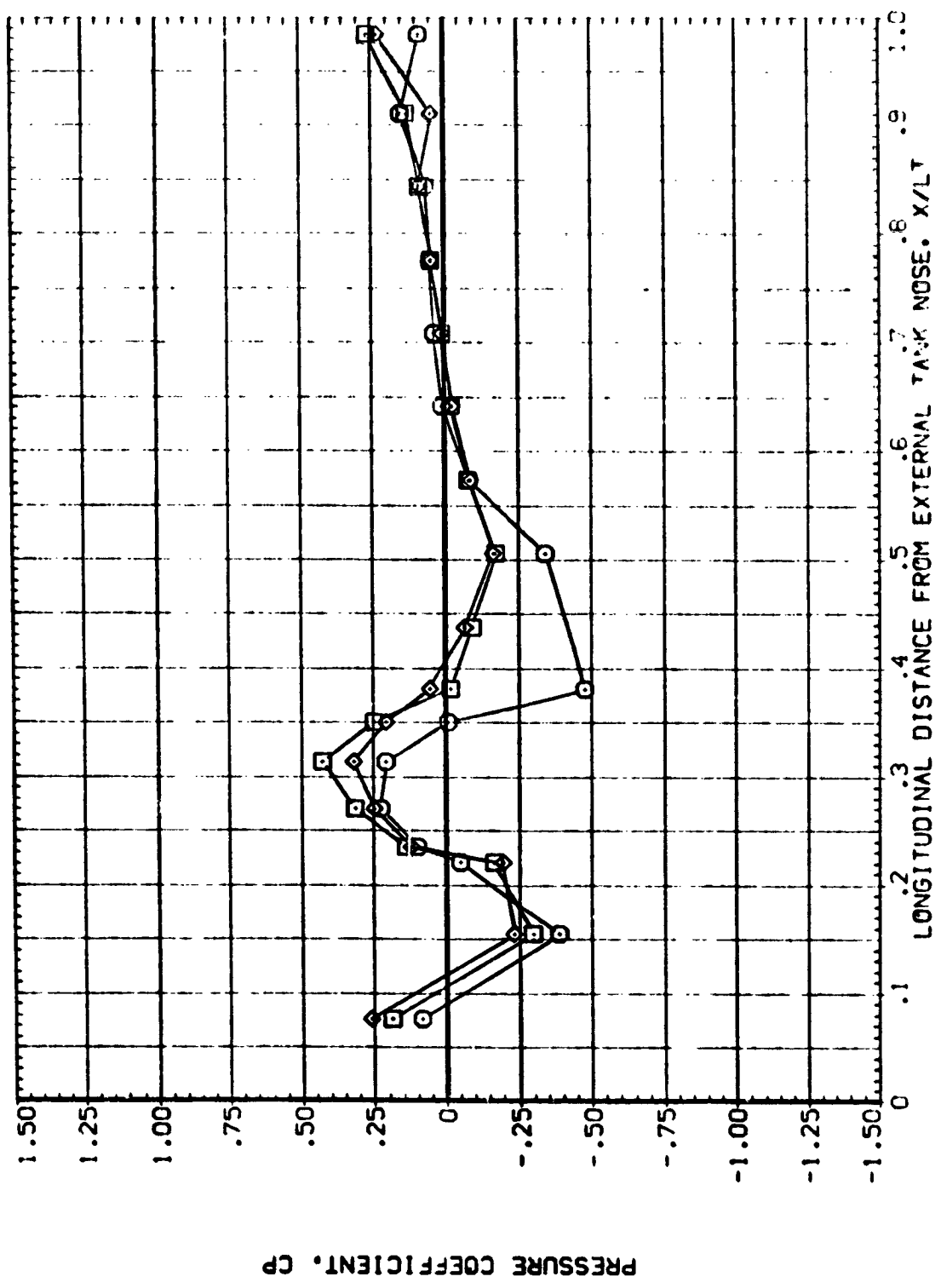
SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	216.000	234.000	-8.000	.900			SREF	6.198	50. IN.	BETA	CONF IG	CONF IG	CONF IG	CONF IG
□	234.000						LREF	5.313	IN.	DELTA Z	CONF IG	CONF IG	CONF IG	CONF IG
◇	252.000						BREF	5.313	IN.	X-SRB	CONF IG	CONF IG	CONF IG	CONF IG
							YMRP	2.549	IN.		CONF IG	CONF IG	CONF IG	CONF IG
							ZMRP	.000	IN.		CONF IG	CONF IG	CONF IG	CONF IG



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRD	YMRD	ZMRD	SREF	LREF
○	270.000	-8.000	.900	6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	288.000									.140	RCDER
◇	306.000									.000	CS2INC
										.500	CS2INC



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL  
 324.000  
 342.000  
 360.000

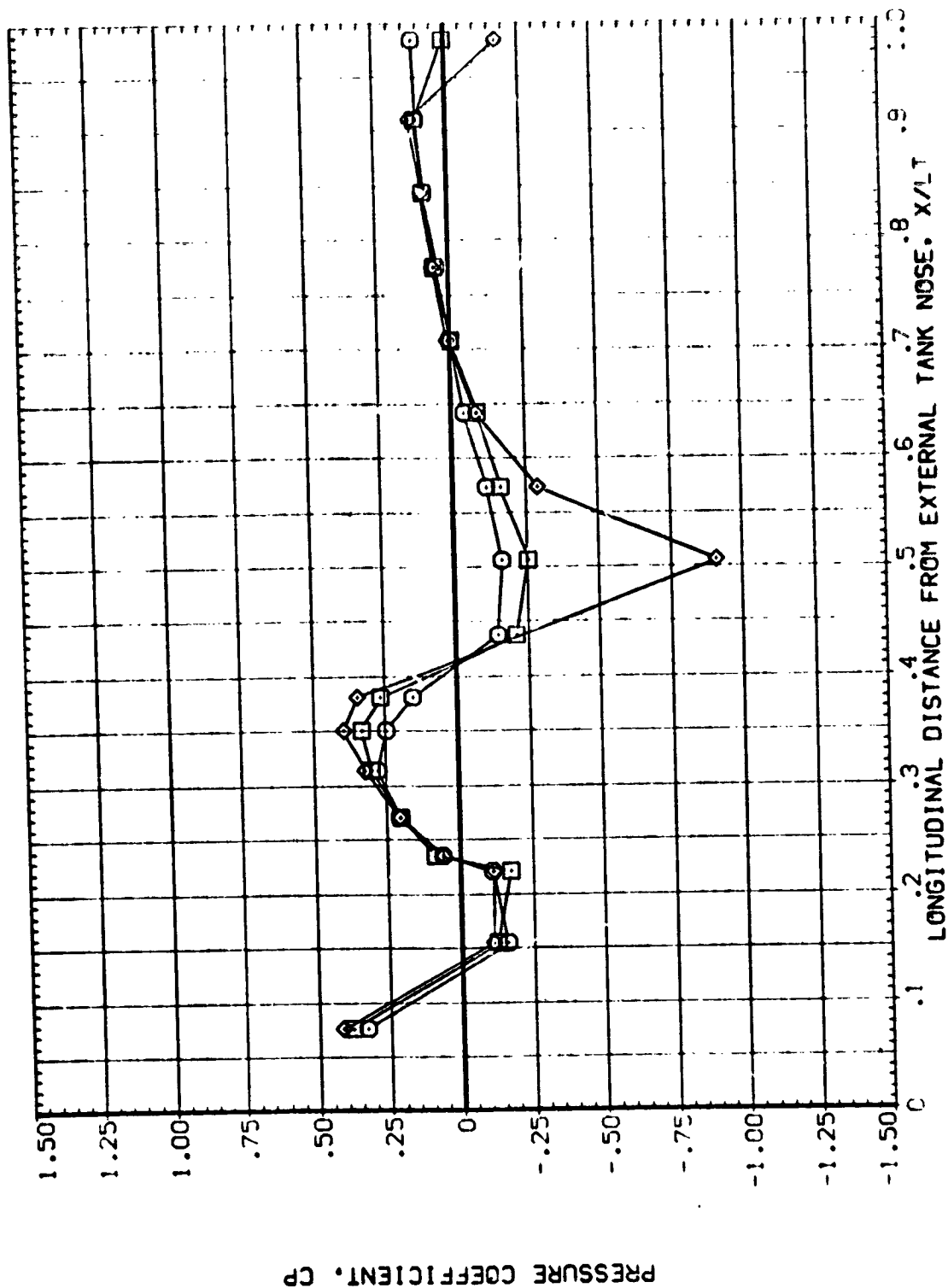
PHI  
 -8.000  
 MACH  
 .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XREF 2.549  
 YREF .000  
 ZREF .000

SO. IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA  
 X-SRB

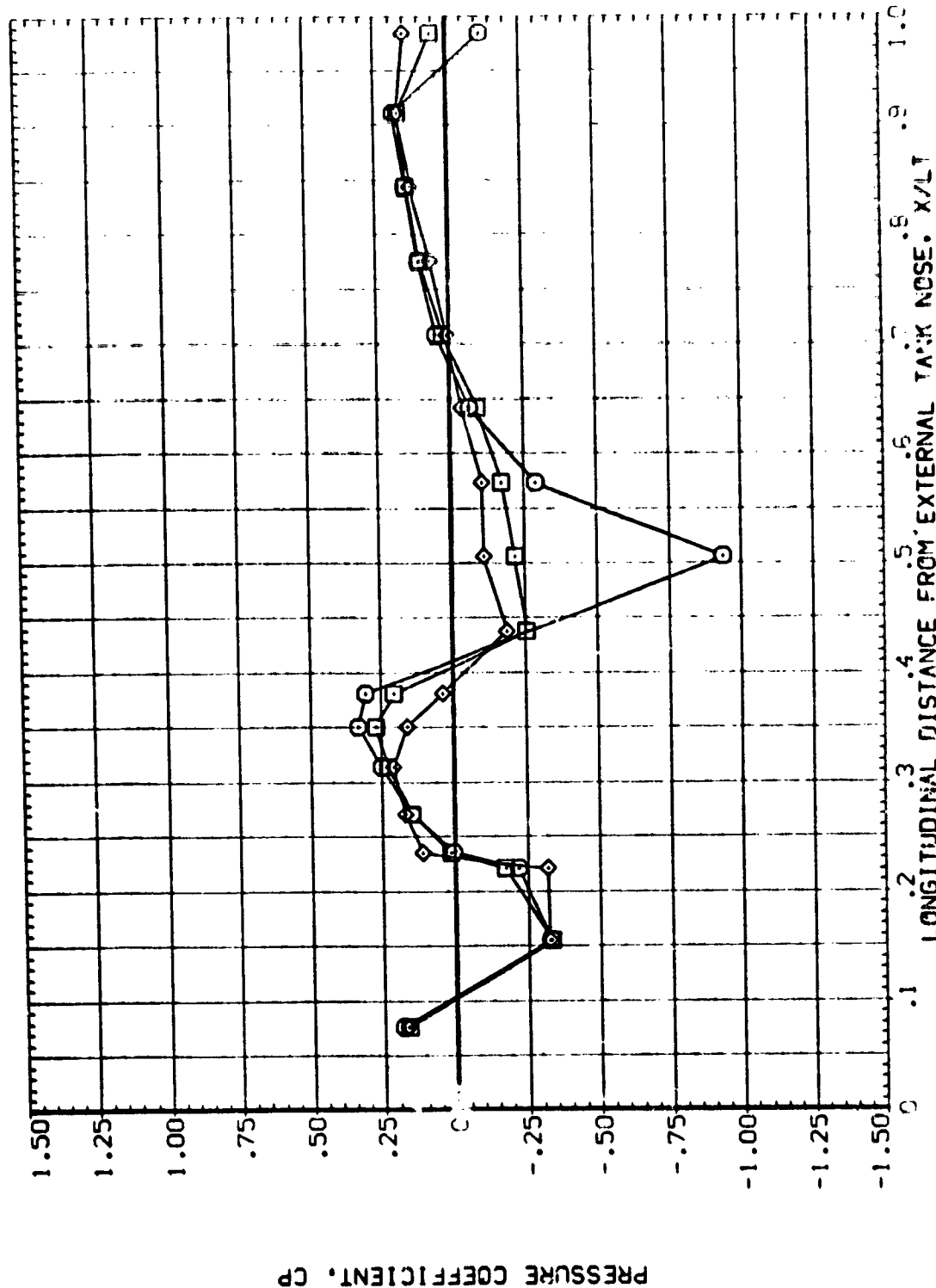
PARAMETRIC VALUES  
 .000 CONF 15  
 .140 R-ORDER  
 .000 D  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82105)

SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA		BETA		PARAMETRIC VALUES	
	.000	.000	.000	.000	.900		SREF	6.198	50. IN.	CONF 15	.000	90.000
□	18.000						LREF	5.313	IN.	RLEDER	.140	.000
◇	36.000						BREF	5.313	IN.	SRBINE	.000	.000
							YMRP	2.549	IN.			
							ZMRP	.000	IN.			

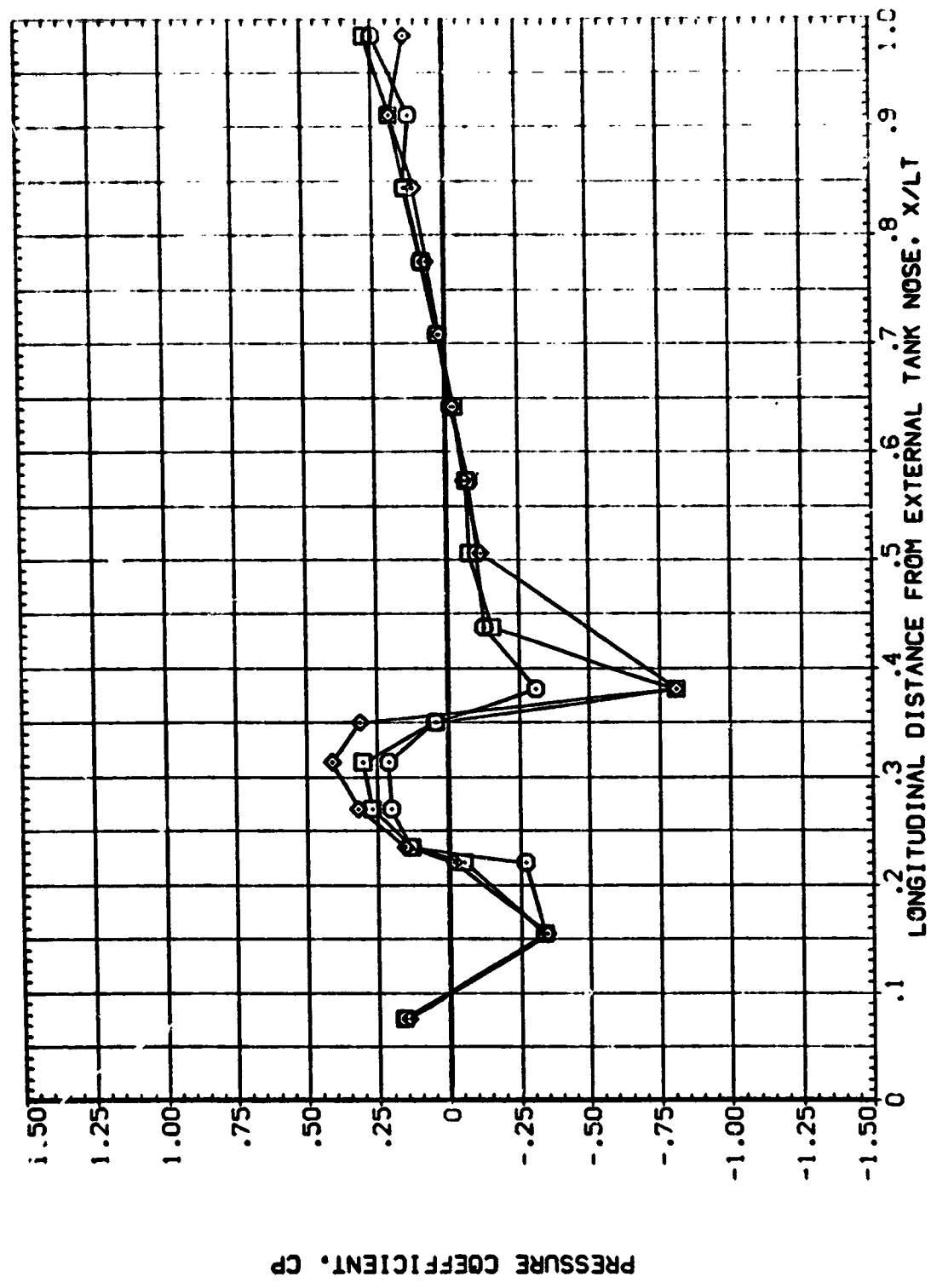


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

5-5

MSFC 567(1A32F) T9 S3/2 S3/2 03 3 EXTERNAL TANK(192705)

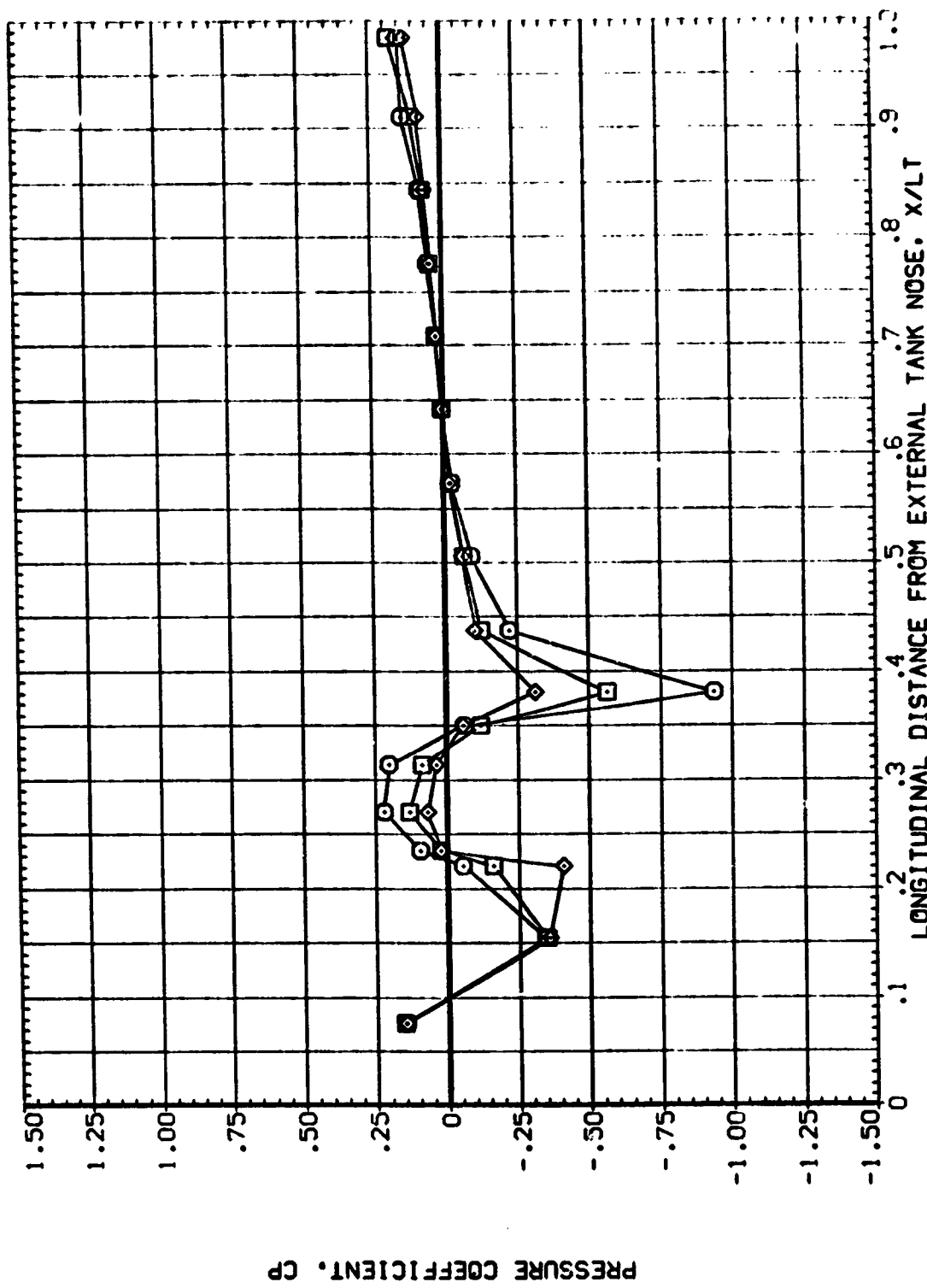
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONF IS	90.000
○	54.000	.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	72.000							IN.	1-458	.000	.000
◇	90.000							IN.		.000	.000
								IN.			.000
								IN.			.000
								IN.			.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	108.000	.000	.900	SREF 6.198	CONF IG	90.000
□	126.000	.000	.900	LREF 5.313	DELTA Z	.000
◇	144.000	.000	.900	BREF 5.313	RCDER	.000
				XMRP 2.549	ORB INC	.500
				YMRP .000		
				ZMRP .000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 □  
 ◇

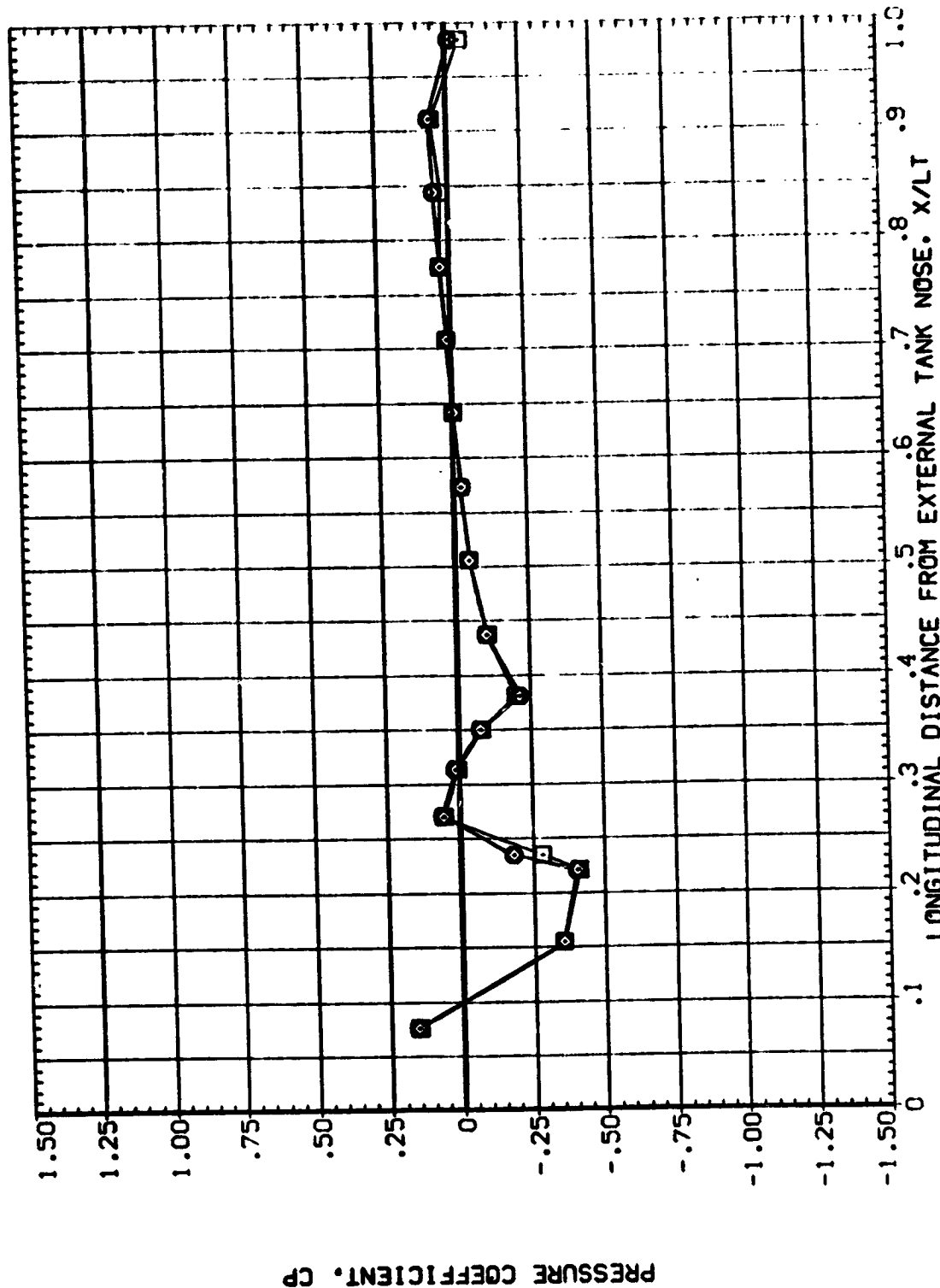
PHI 162.000  
 180.000  
 198.000

ALPHA .000  
 MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.  
 IN.

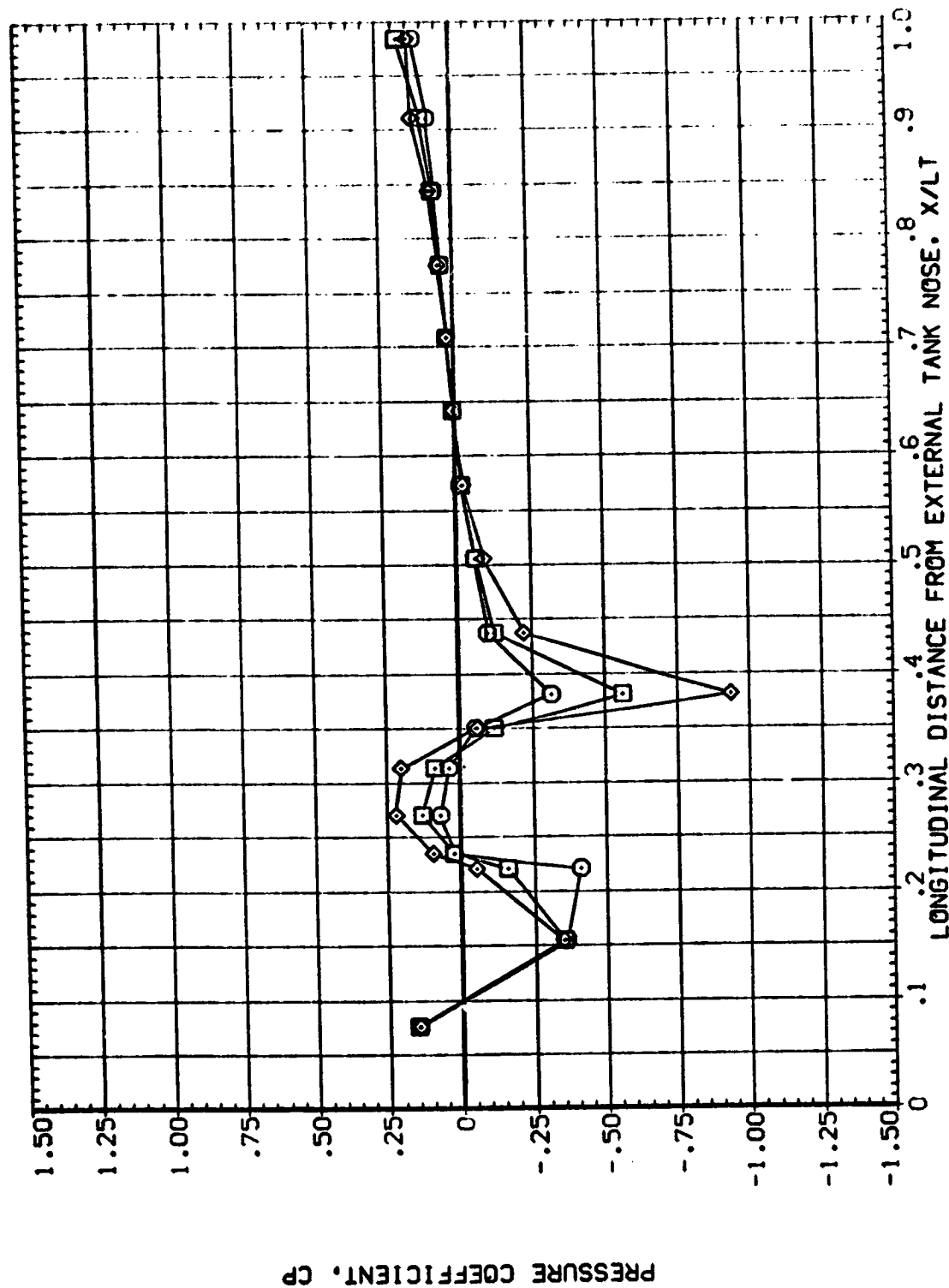
PARAMETRIC VALUES  
 .000 CONFIC  
 .140 RUDDER  
 .000 SRB INC  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

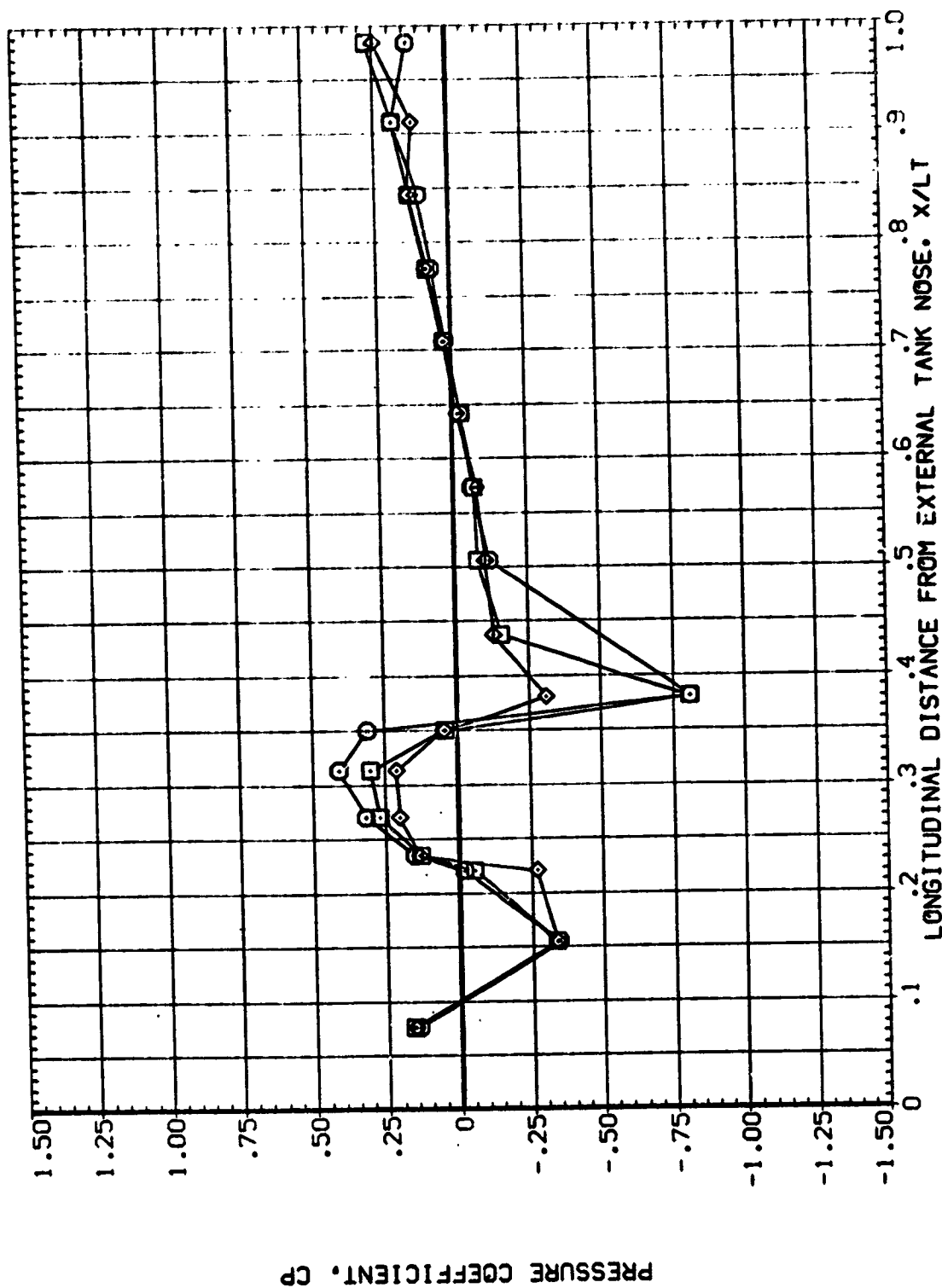
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	RUDDER	ORBIT INC
○	216.000	.000	.900	6.198	5.313	5.313	.000	DELTA Z	.000	.140	.000
□	234.000			2.549			.000	X-SRB	.000	.000	.500
◇	252.000			.000			.000				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

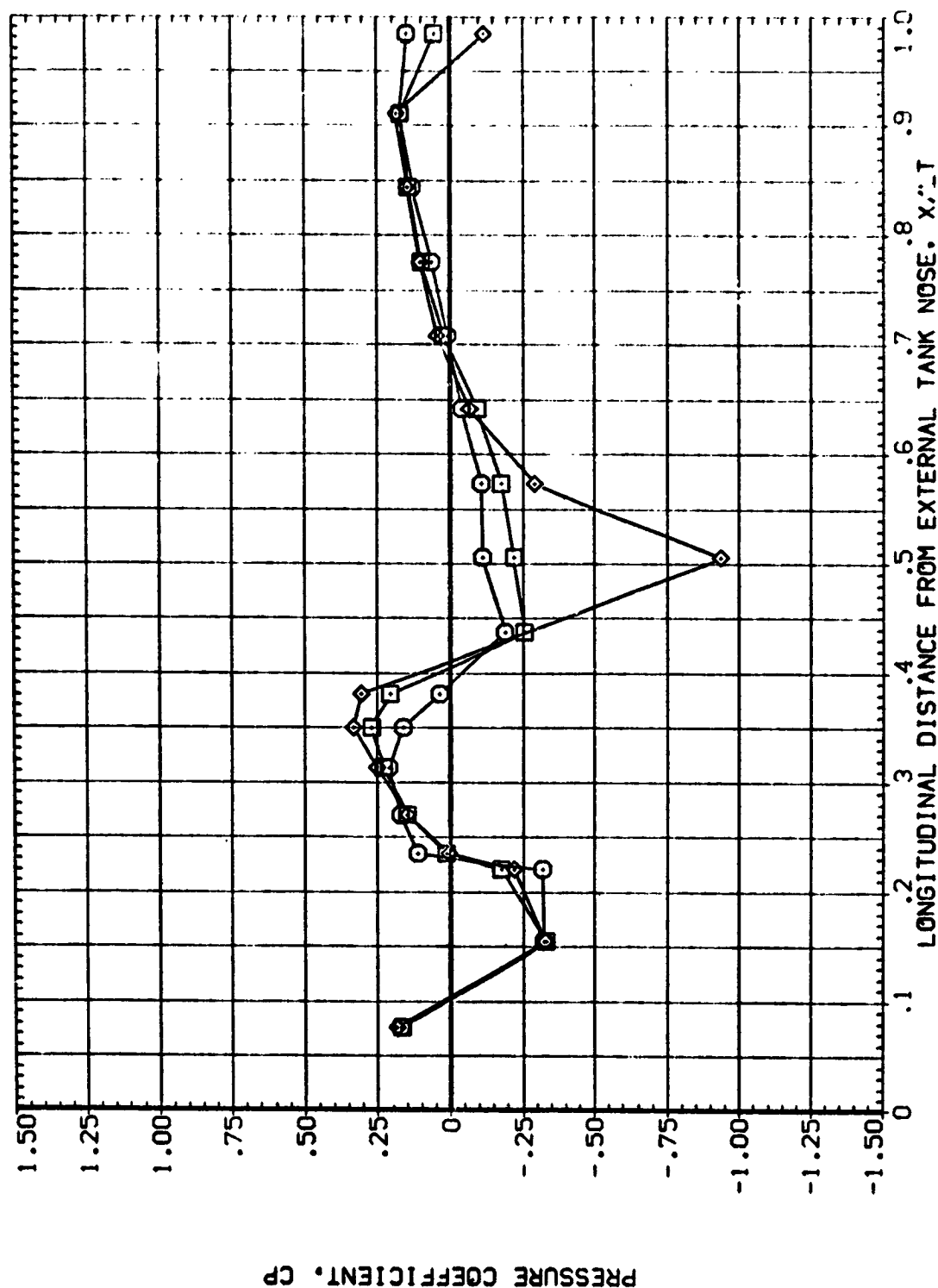
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	BETA	DELTAZ
○	270.000	.000	.900	6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	288.000	.000	.900	5.313	5.313	5.313	2.549	.000	.000	.000	.000
◇	306.000	.000	.900	5.313	5.313	5.313	2.549	.000	.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	324.000	.000	.900	SREF 6.198	.000	CONF IG
□	342.000			LREF 5.313	.140	RUDER
◇	360.000			BREF 5.313	.000	WING INC
				XPRP 2.549		
				YPRP .000		
				ZPRP .000		

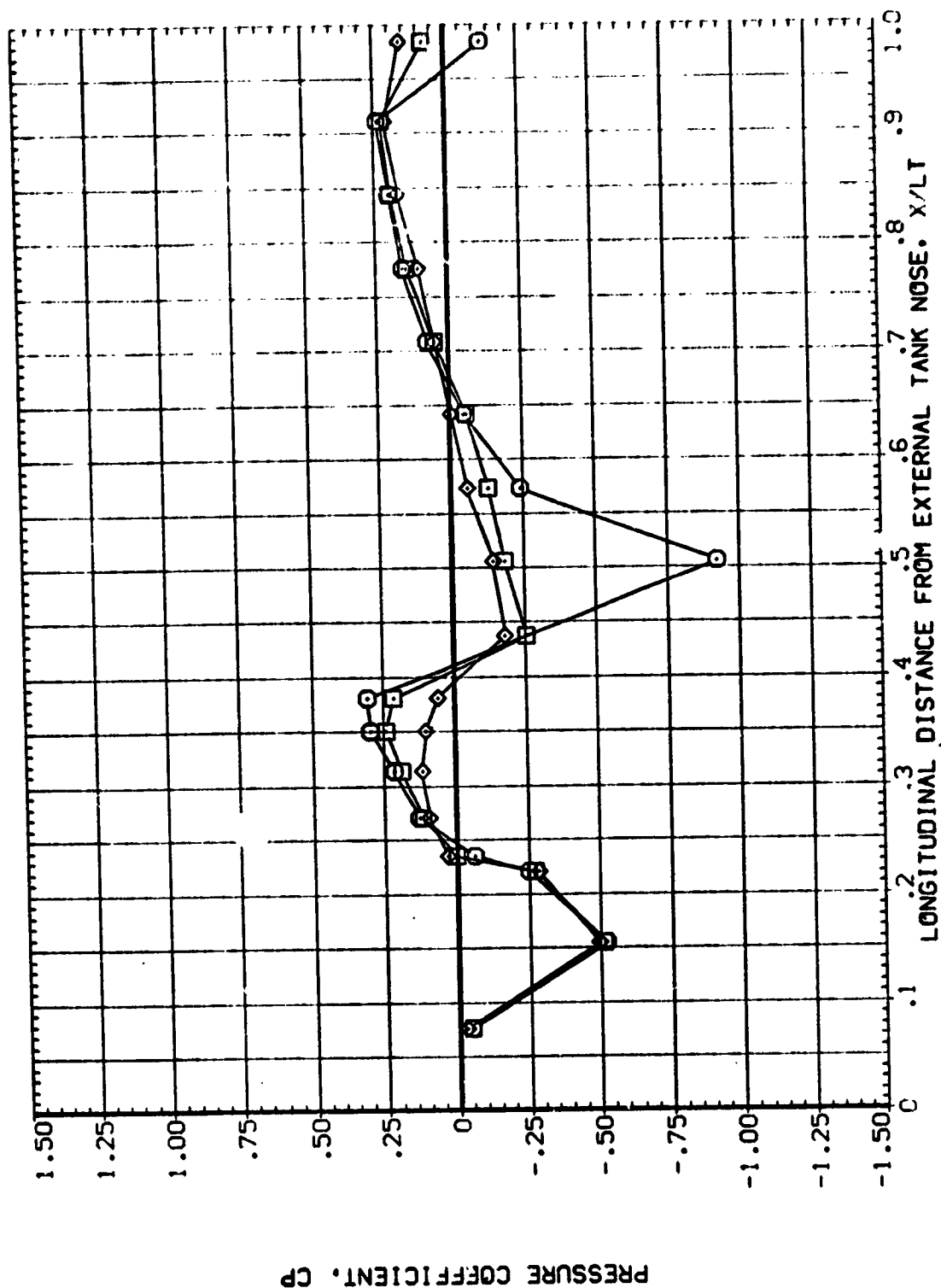


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

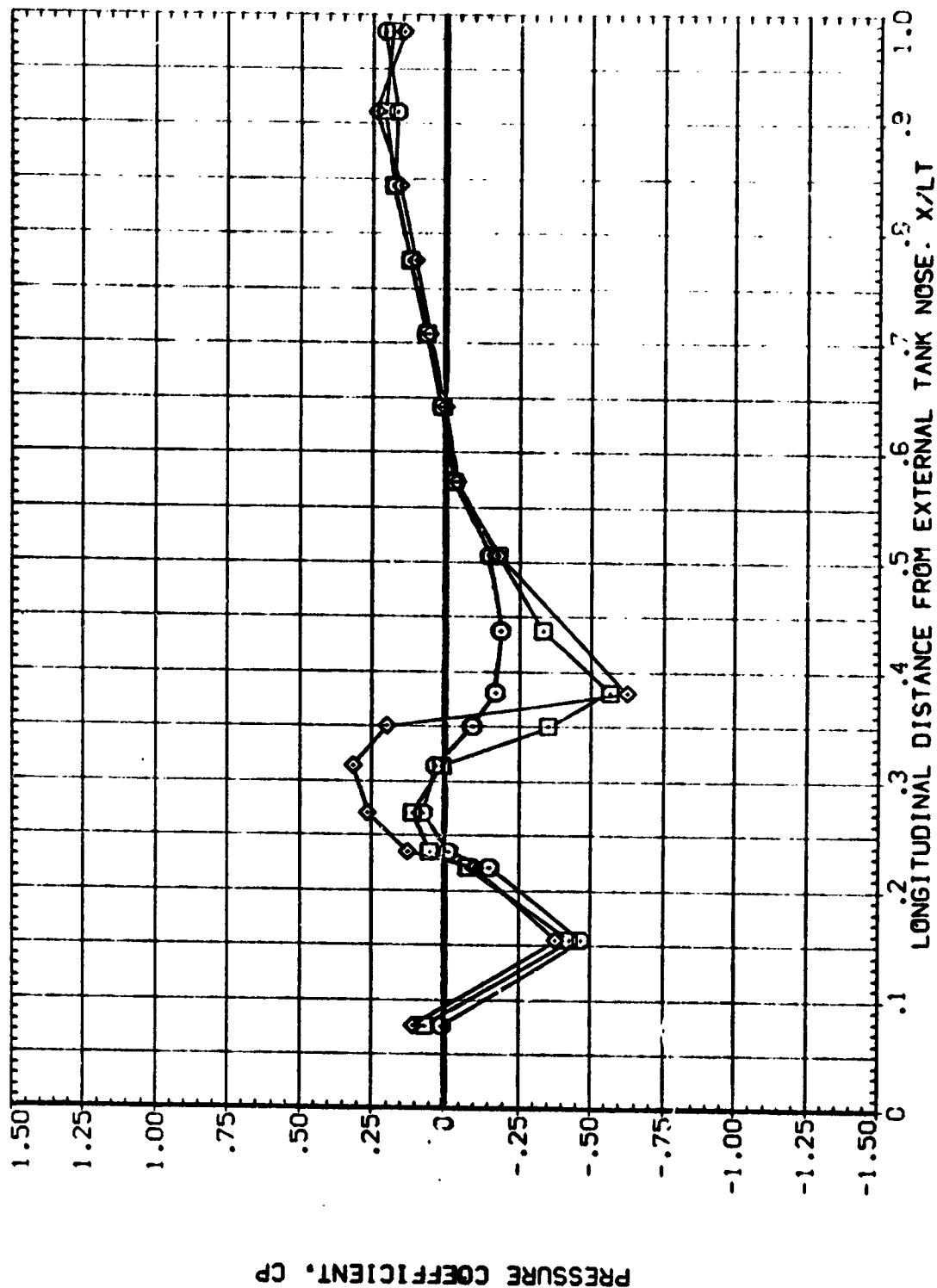
PARAMETRIC VALUES		
PHI	ALPHA	MACH
.000	8.000	.900
18.000		
36.000		
REFERENCE DATA		
SREF	6.198	50. IN.
LREF	5.313	IN.
BREF	5.313	IN.
XMRP	2.549	IN.
YMRP	.000	IN.
ZMRP	.000	IN.
PARAMETRIC VALUES		
CONFIG	BETA	
.000	DELTA Z	
.140	Y-SRB	
.030	DRB INC	
.000		
.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

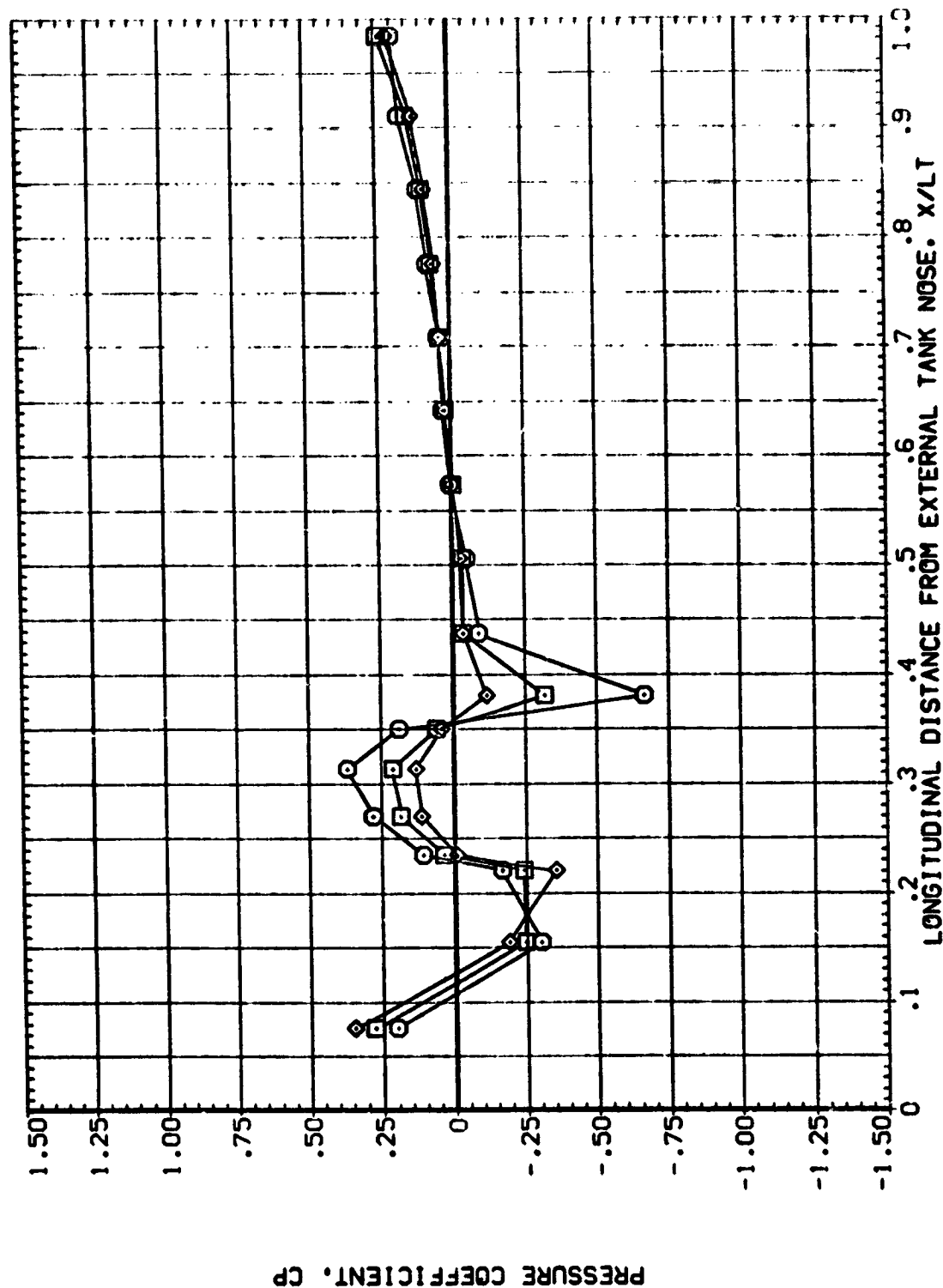
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SD, IN.	BETA	CONF IG	90,000
○	54.000	8.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	72.000							IN.	X-SRB	.000	.000
◇	90.000							IN.		.000	.500
				ZPRP				IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

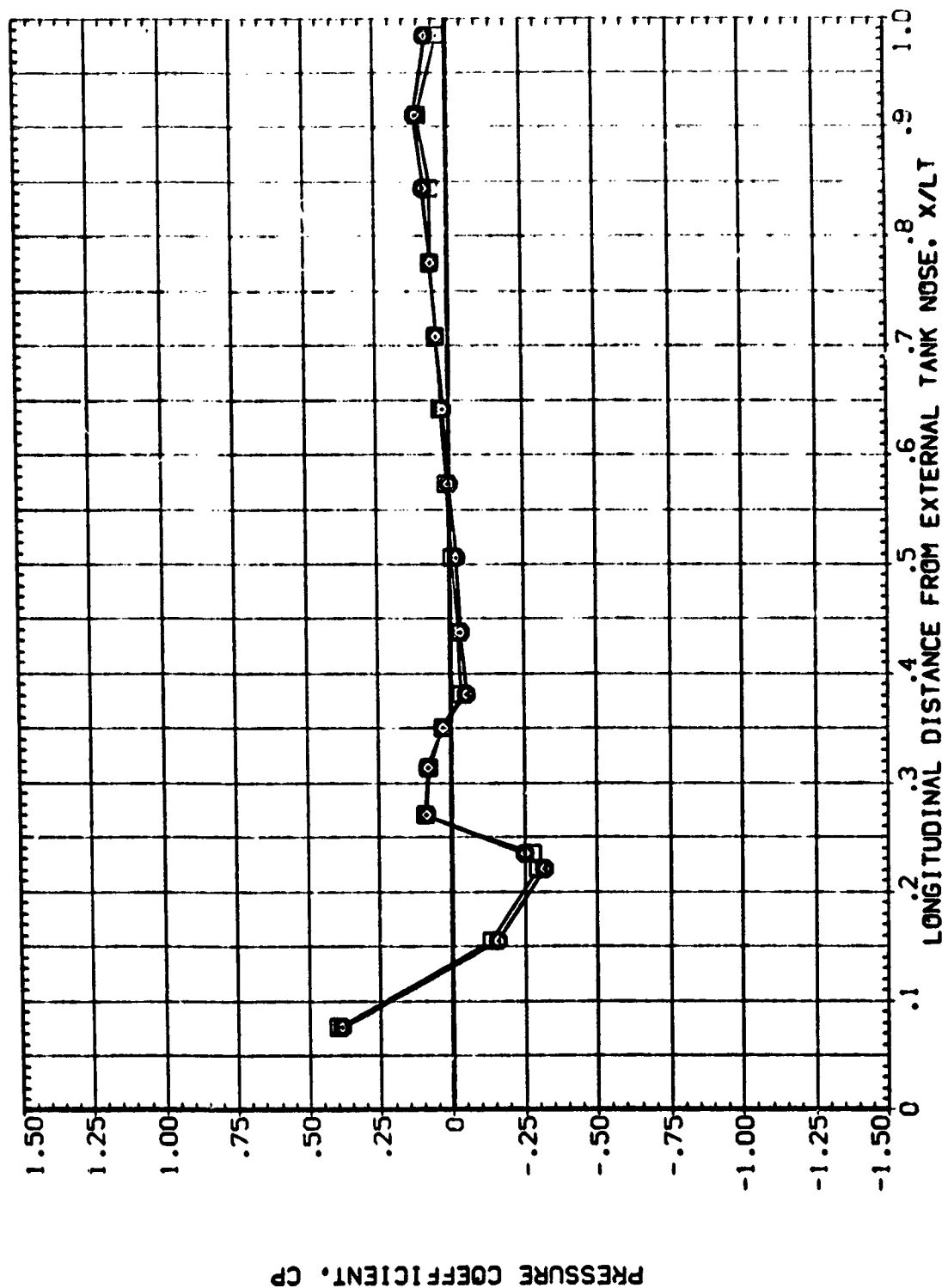
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CC-F16	CC-F16	90.000
□	108.000	8.000	.900	5.198	5.313	DELTAZ	5.313	DELTAZ	.140	RUDER	.000
◇	126.000			2.549	2.549	Y-MRP	2.549	Y-MRP	.000	ORBITAL	.500
◇	144.000			.000	.000	Z-MRP	.000	Z-MRP	.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

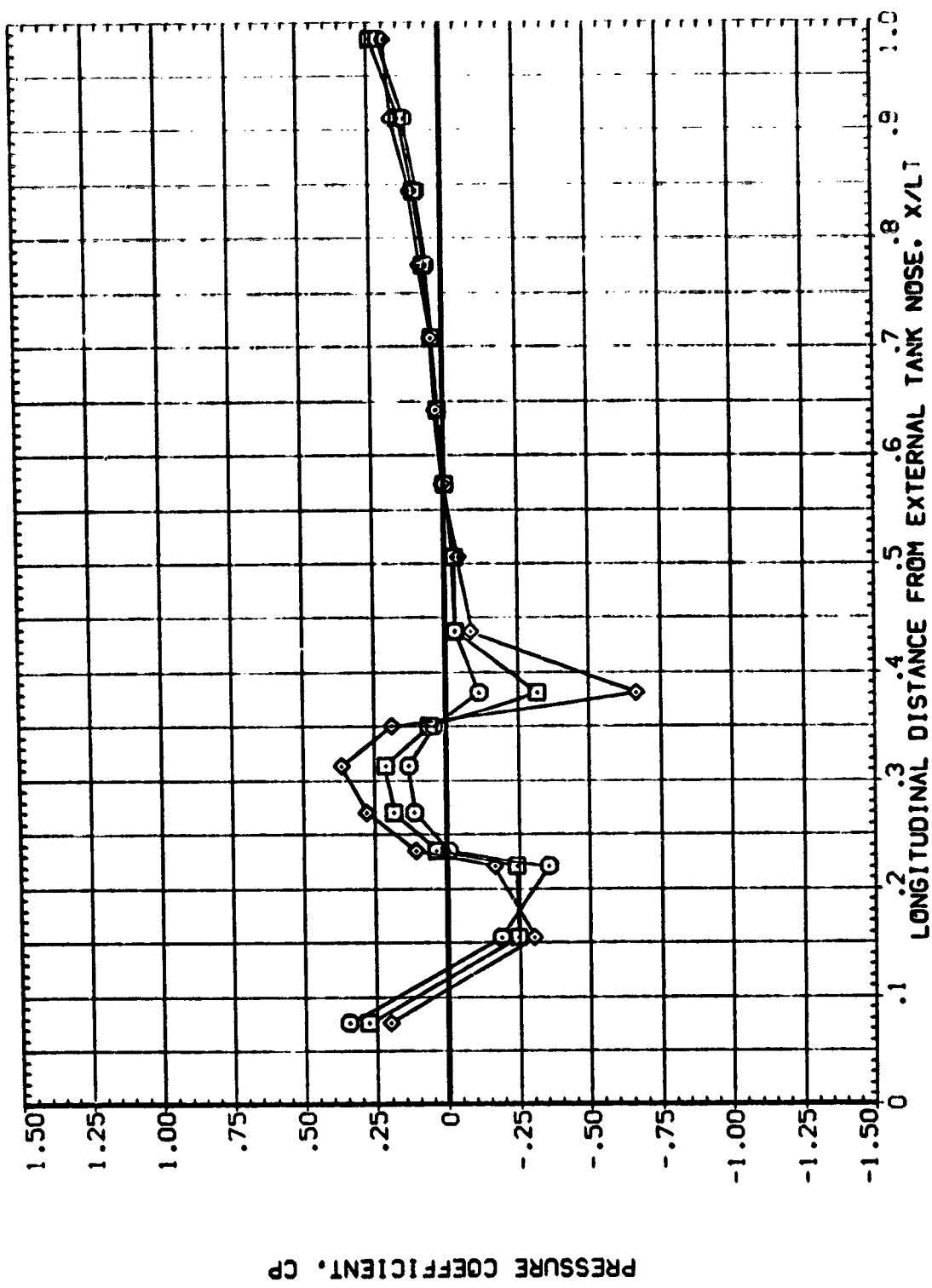
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YPRP	SO. IN.	BETA	CONFIS	SO.000
○	162.000	8.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
□	180.000							IN.	X-SRB	ORBINC	.000
◇	198.000							IN.			.500
				YPRP	ZPRP			IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

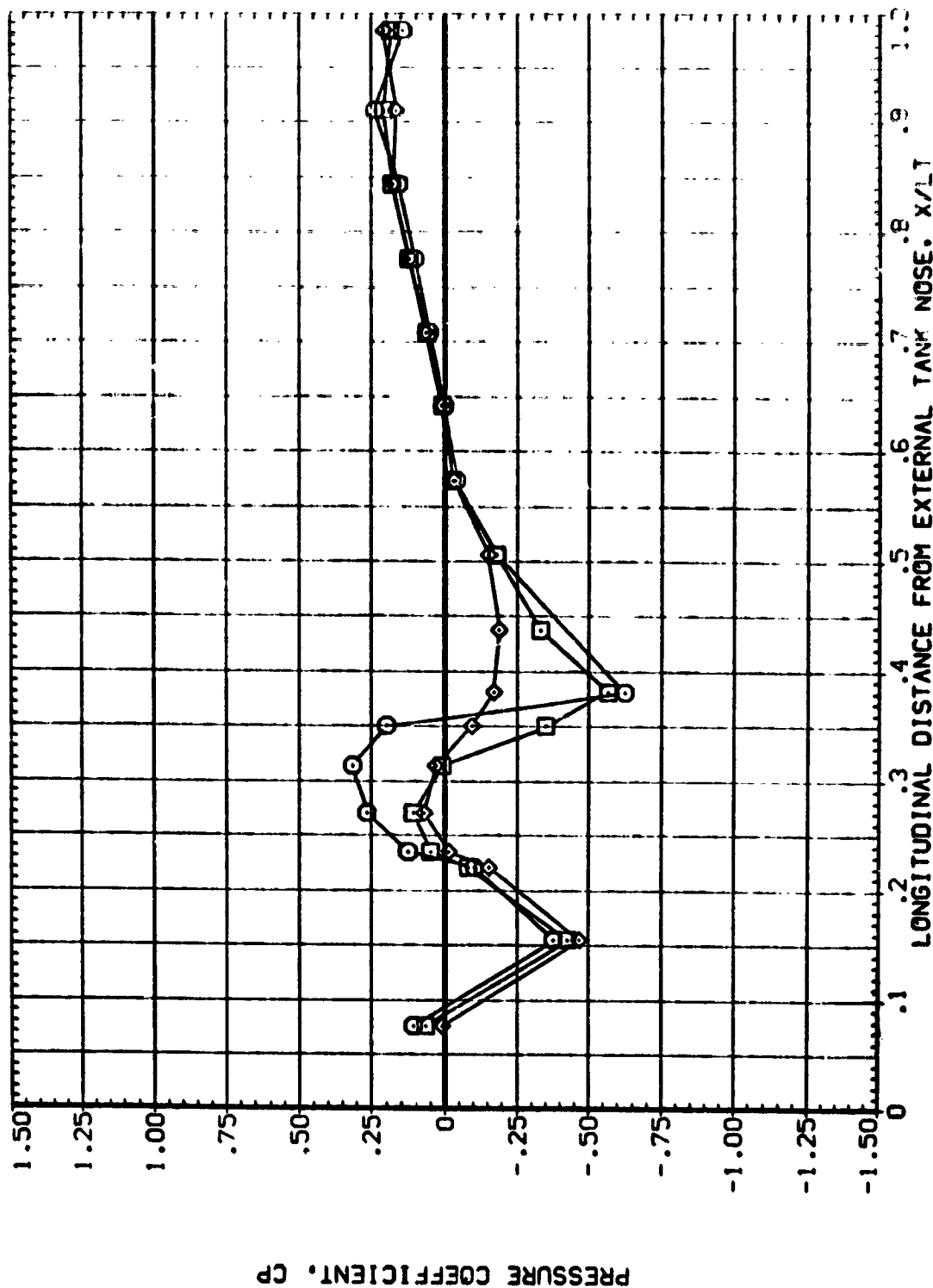
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		BETA		PARAMETRIC VALUES		
				SREF	6.198	SO. IN.	DELTA	.000	CONF IG	90.000
○	216.000	0.000	.900	LREF	5.313	IN.	DELTA Z	.140	R-CTER	.000
□	234.000			BREF	5.313	IN.	Y-SRB	.000	ORBITAL	.500
◇	252.000			YPRP	2.545	IN.				
				ZPRP	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

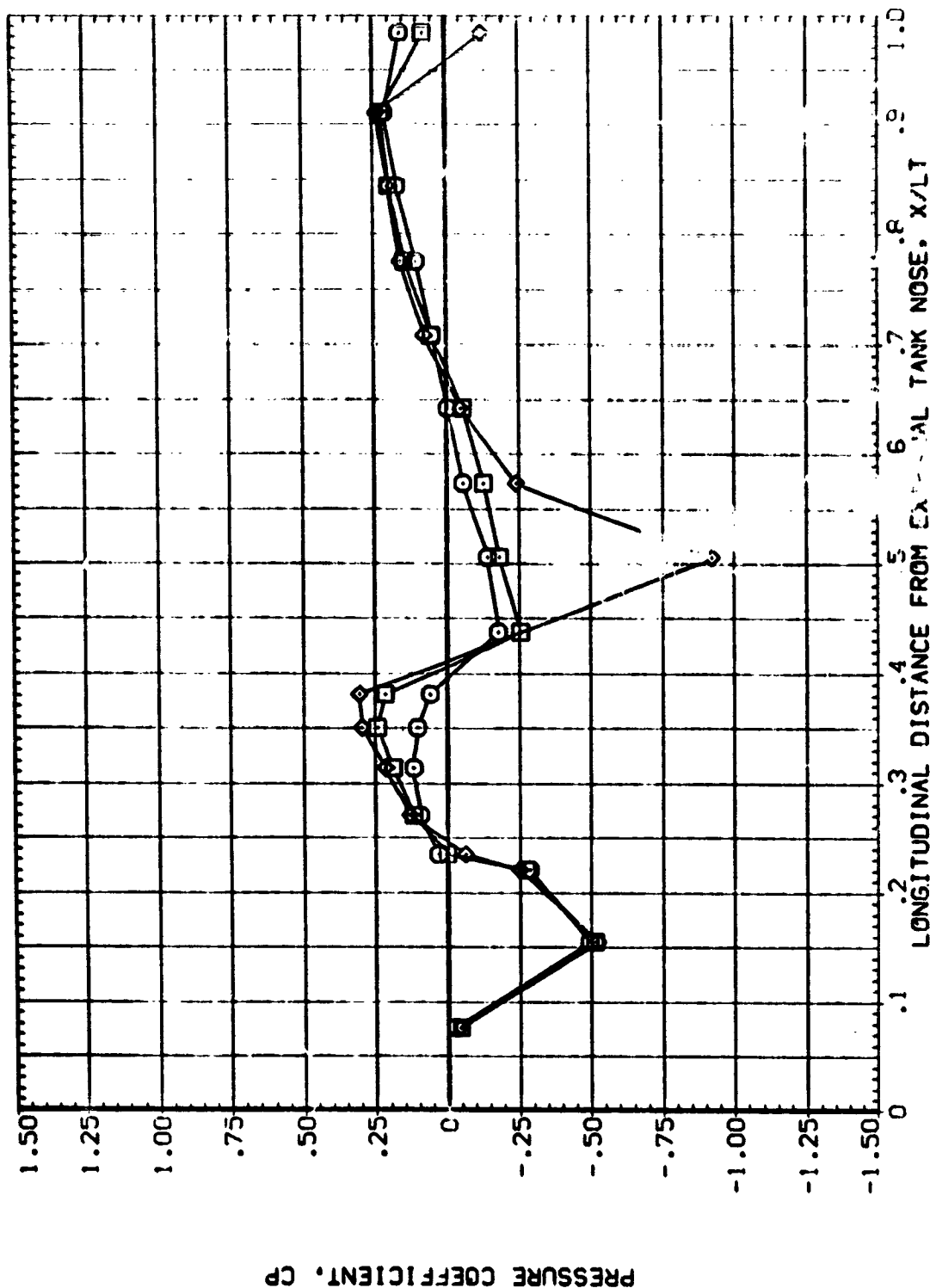
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	6.198	50. IN.	BETA	CONF 15	90.000
○	270.000	8.000	.500	LREF	5.313	IN.	DELTA Z	.140	.000
□	288.000			BREF	5.313	IN.	1-SRB	.000	.500
◇	306.000			XMRP	2.549	IN.			
				YMRP	.000	IN.			
				ZMRP	.000	IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82T05)

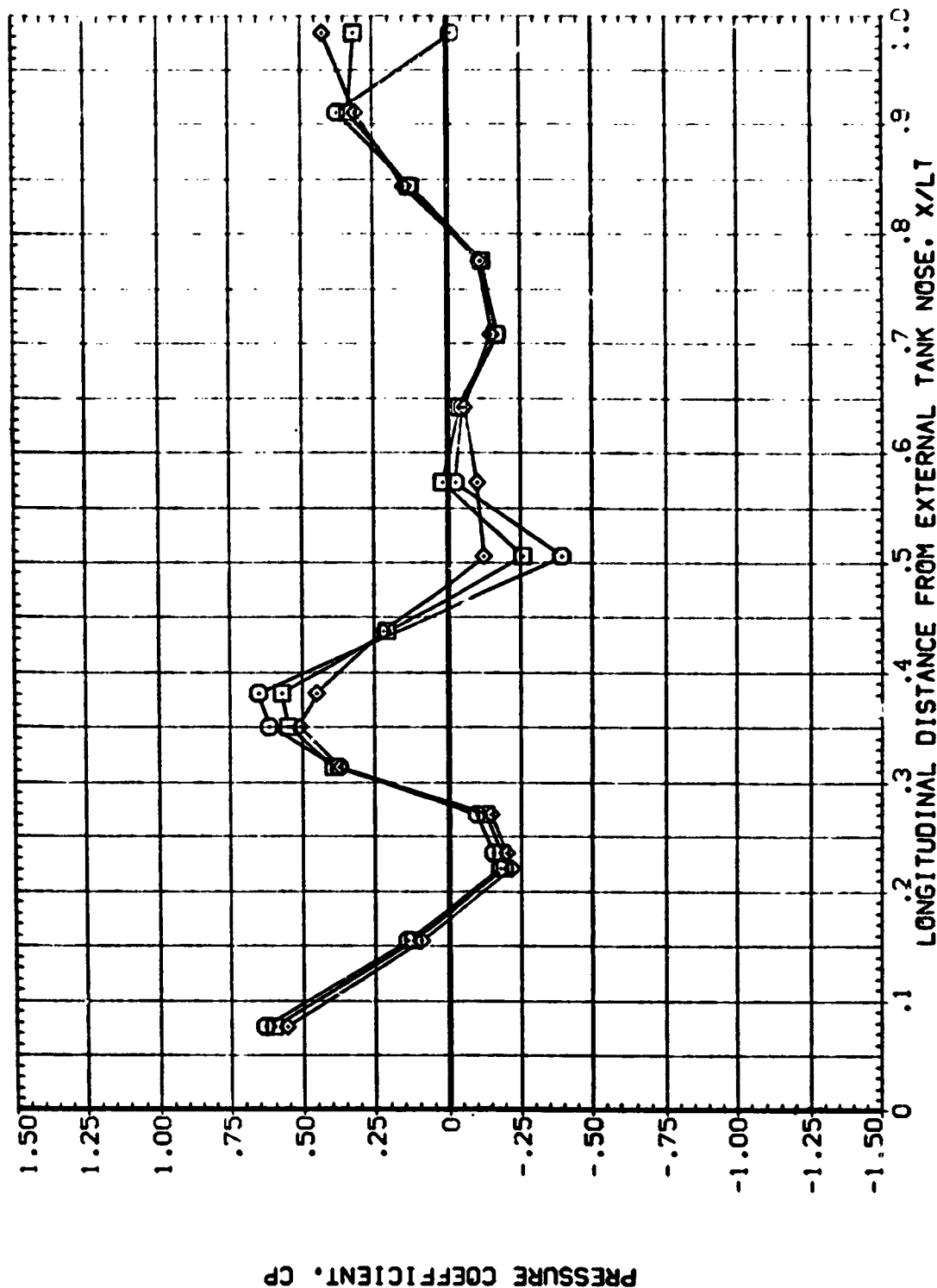
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONFIG	RUDDER	ORBITAL
□	324.000	8.000	.900	6.198	5.313	5.313	2.549	DELTA Z	.000	.000	.500
◇	342.000							X-SPR	.000	.000	
◇	360.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	BETA	CONF IG	SO. IN.
□	.000	-8.000	1.250	6.199	5.313	5.313	2.549	.000	DELTA Z	.000	IN.
◇	18.000								X-SRB	.140	IN.
	36.000									.000	IN.
										.500	IN.

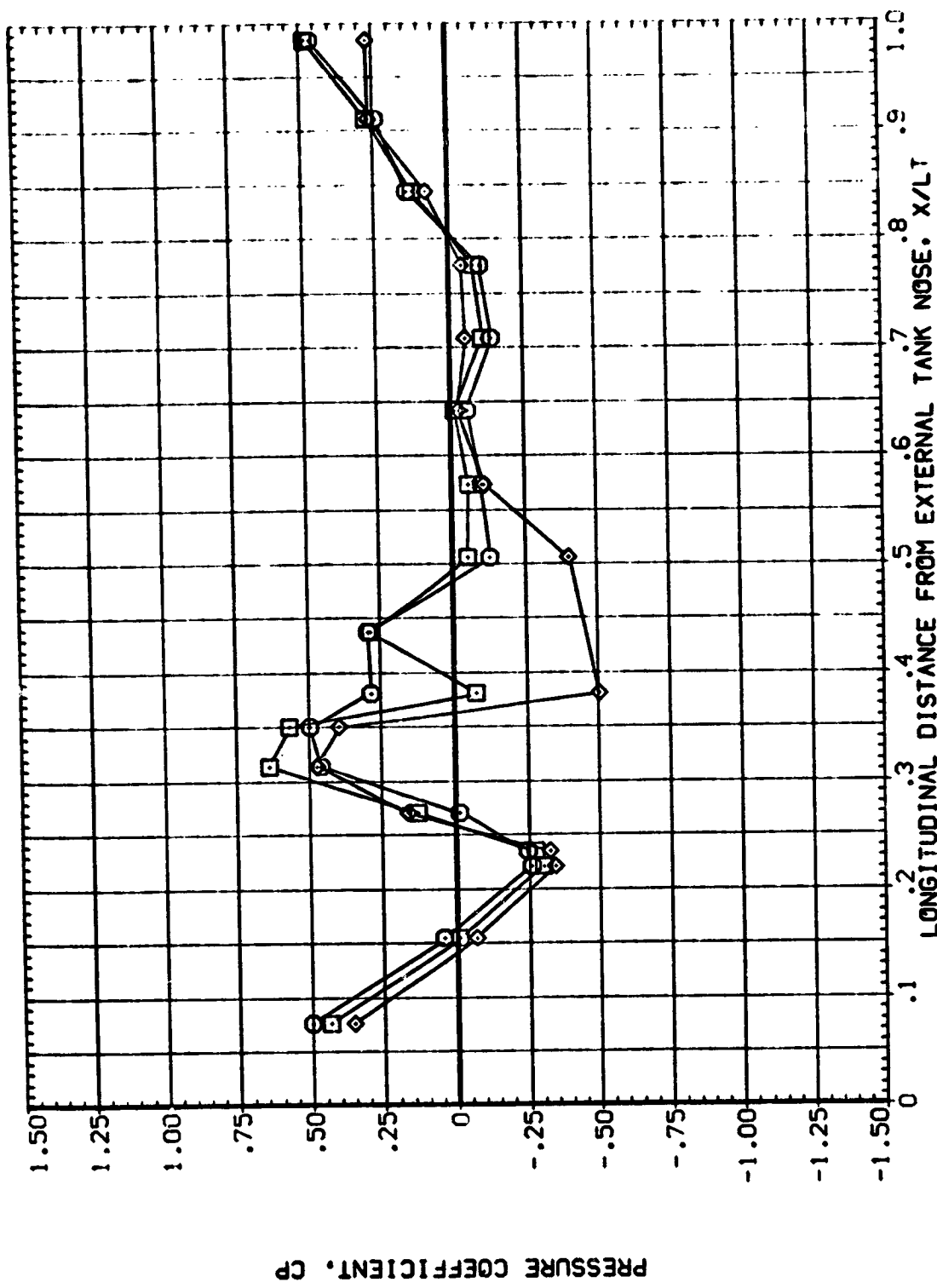


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PNI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	RODDER	ORR INC
◇	54.000	-8.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	72.000							X-SRB	.000	.000	.500
◇	90.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
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 □  
 ◇

PHI  
 108.000  
 126.000  
 144.000

ALPHA  
 -8.000

MACH  
 1.250

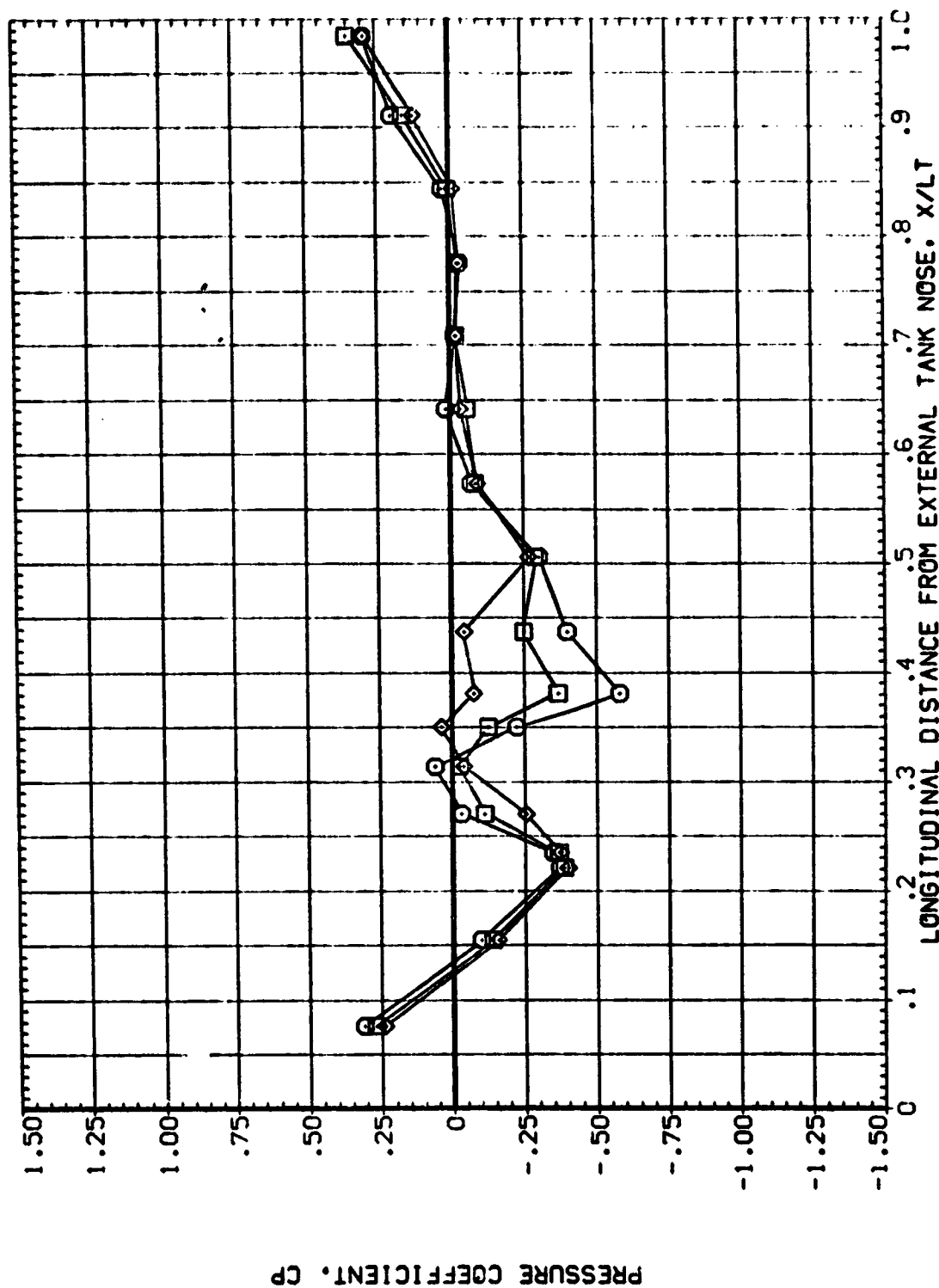
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

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PARAMETRIC VALUES  
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 .000  
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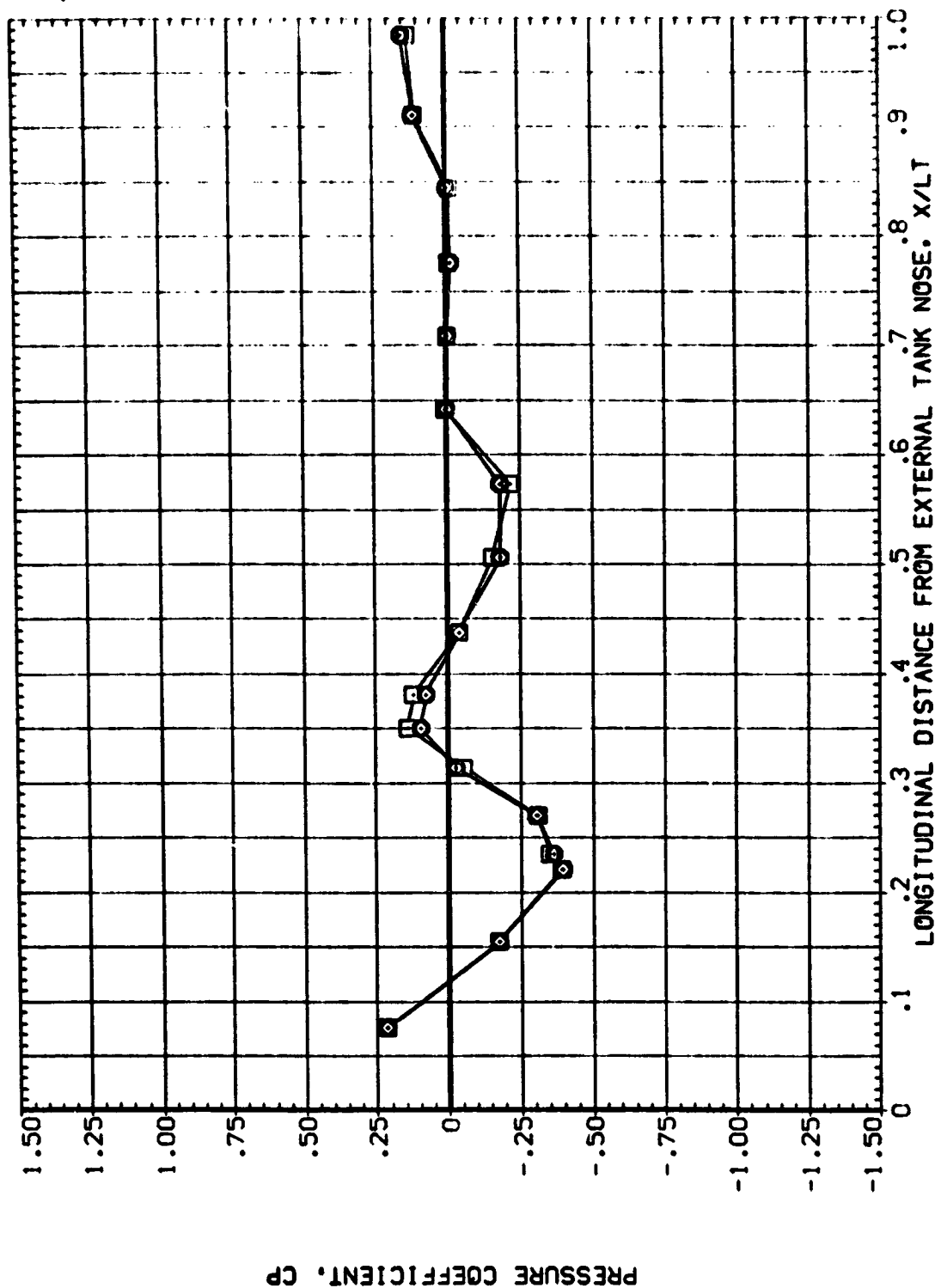
CONF IG  
 RUDDER  
 ORBINC



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

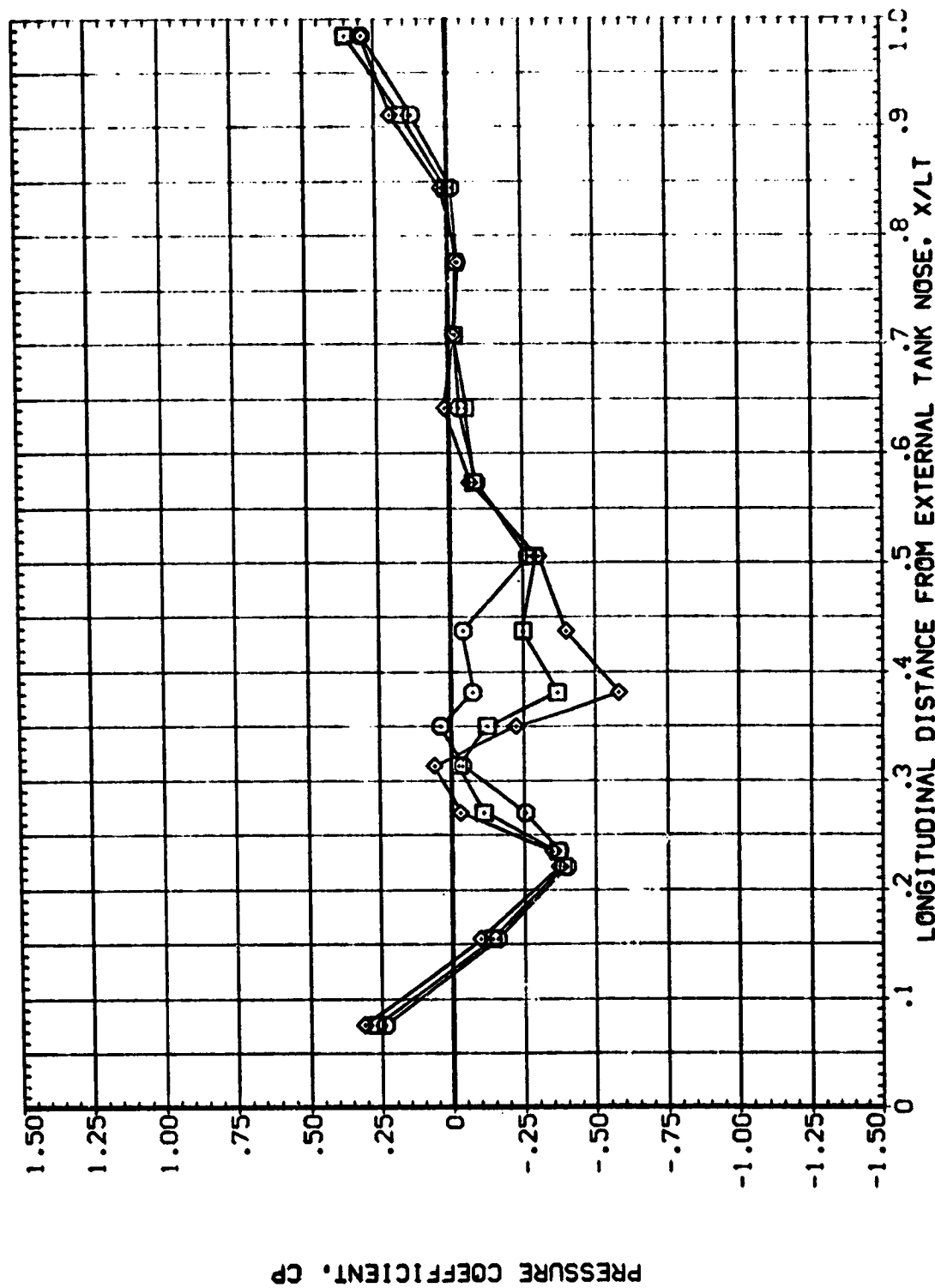
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONF IG	90.000
□	162.000	-8.000	1.250	5.313	5.313	5.313	2.549	IN.	DELTA Z	R.000	.000
◇	180.000							IN.	X-SRB	.000	.500
◇	198.000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

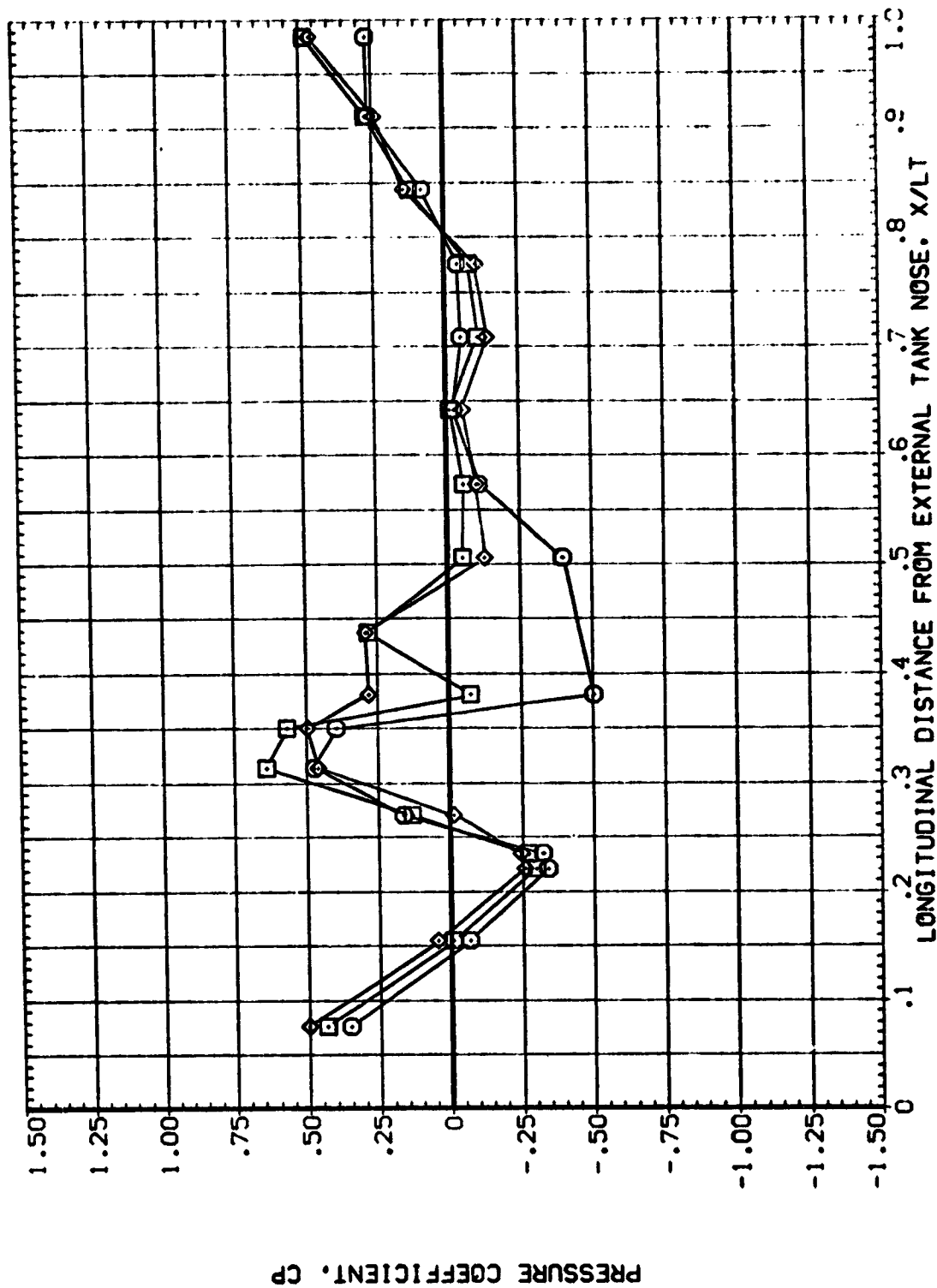
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SG. IN.	BETA	CONFIS
○	216.000	-8.000	1.250	6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	.000
□	234.000								IN.	X-SRB	.000
◇	252.000								IN.		ORBITAL
											.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

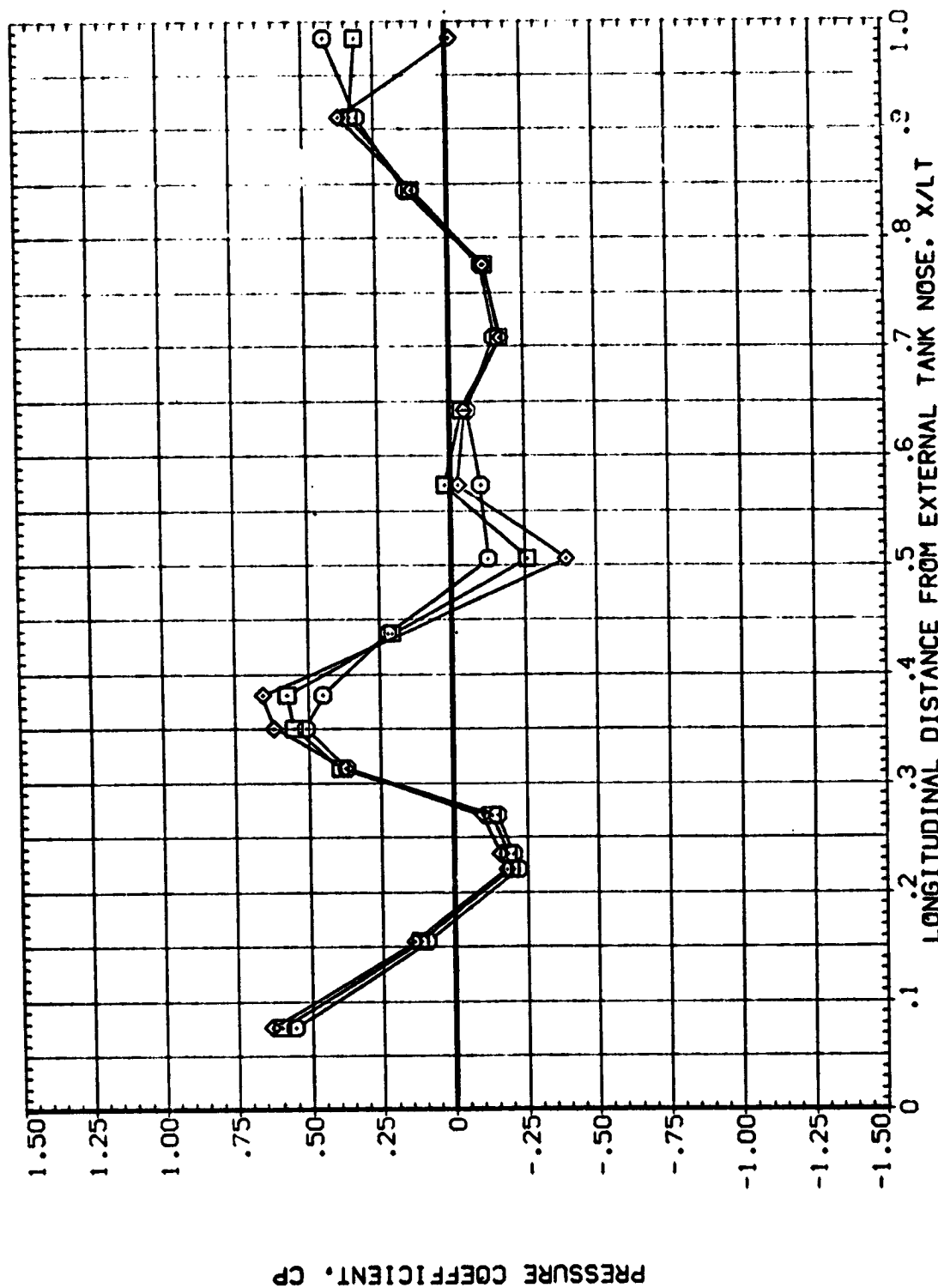
# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	BETA	CONF	BLUDDER	DRG1NC
□	270.000	-8.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	288.000							Y-SRB	.000	.000	.500
◇	306.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

325.  
300.  
90,000



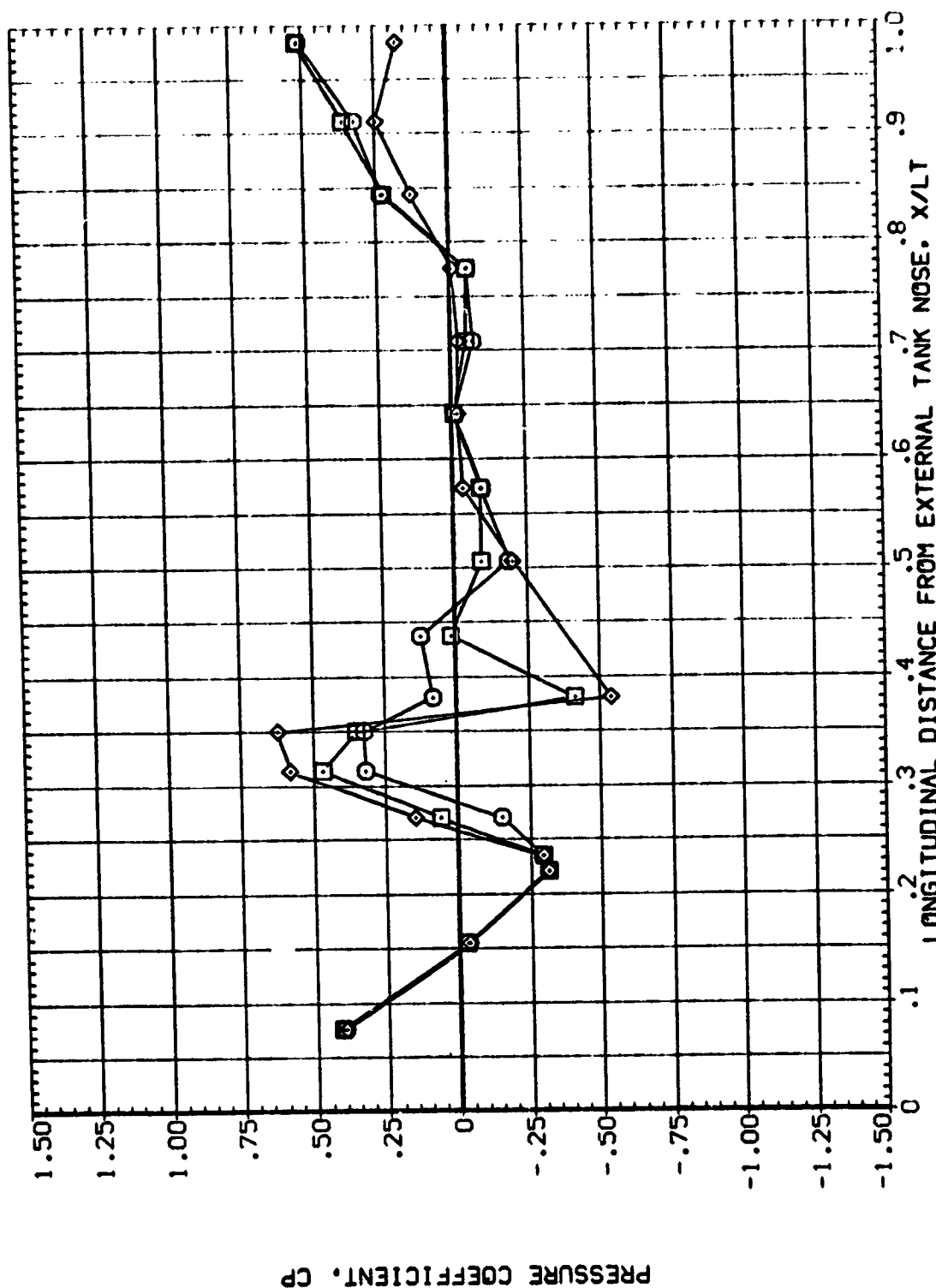
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	BETA	DELTA Z	CONF IG	90.00C
○	.000	.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	X-SRB	.000	.000
□	18.000									.140	.000
◇	36.000									.000	.500
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										.000	.500
										.000	.000
										.000	.500
										.000	.000
										.0	

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	BETA	CONFIG	RUDDER	CRBINC
○	54.000	.000	1.250	6.198	5.313	5.313	.000	DELTA Z	.000	.140	.000
□	72.000			2.549				X-SRB			.500
◇	90.000										

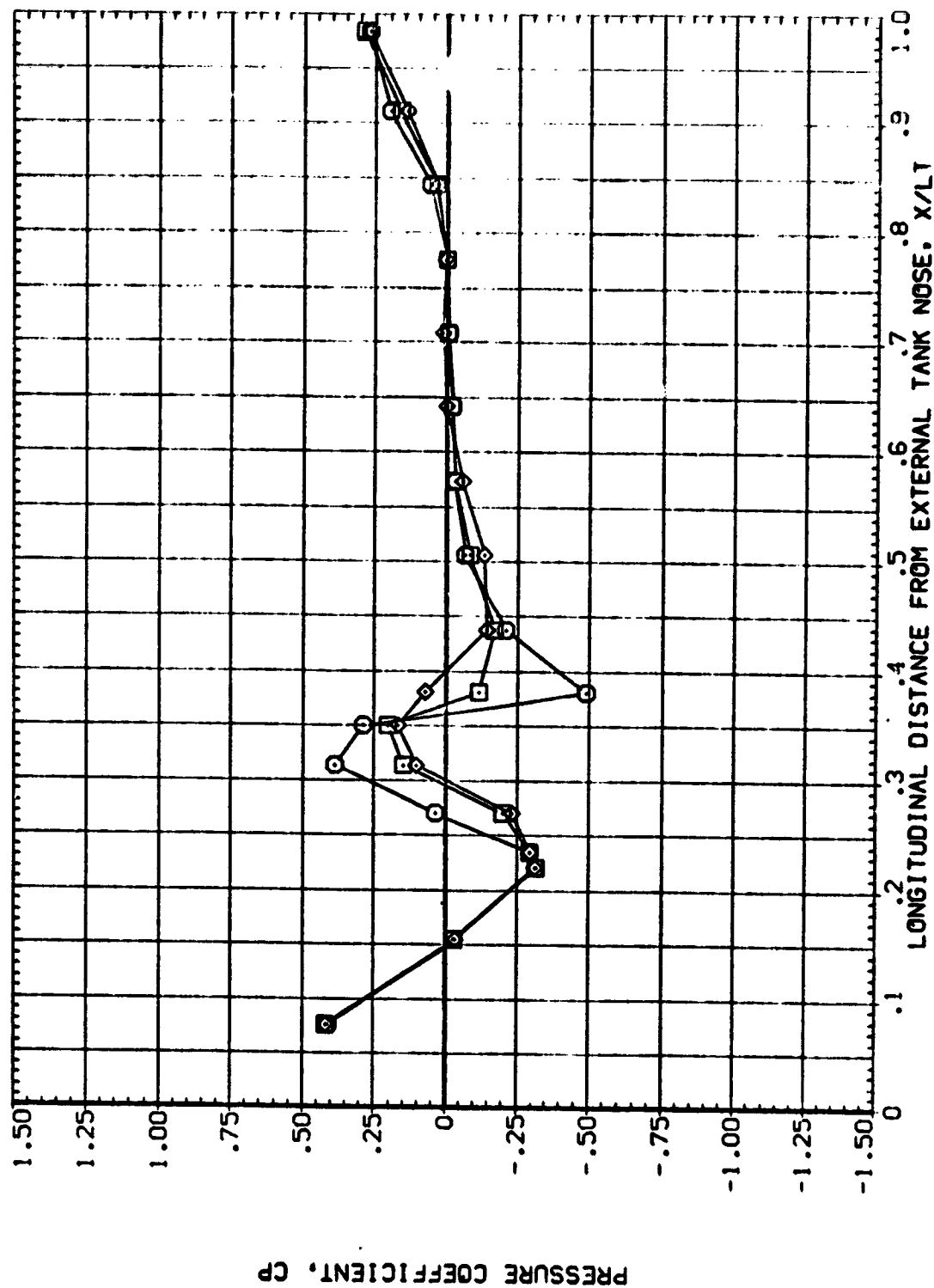


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

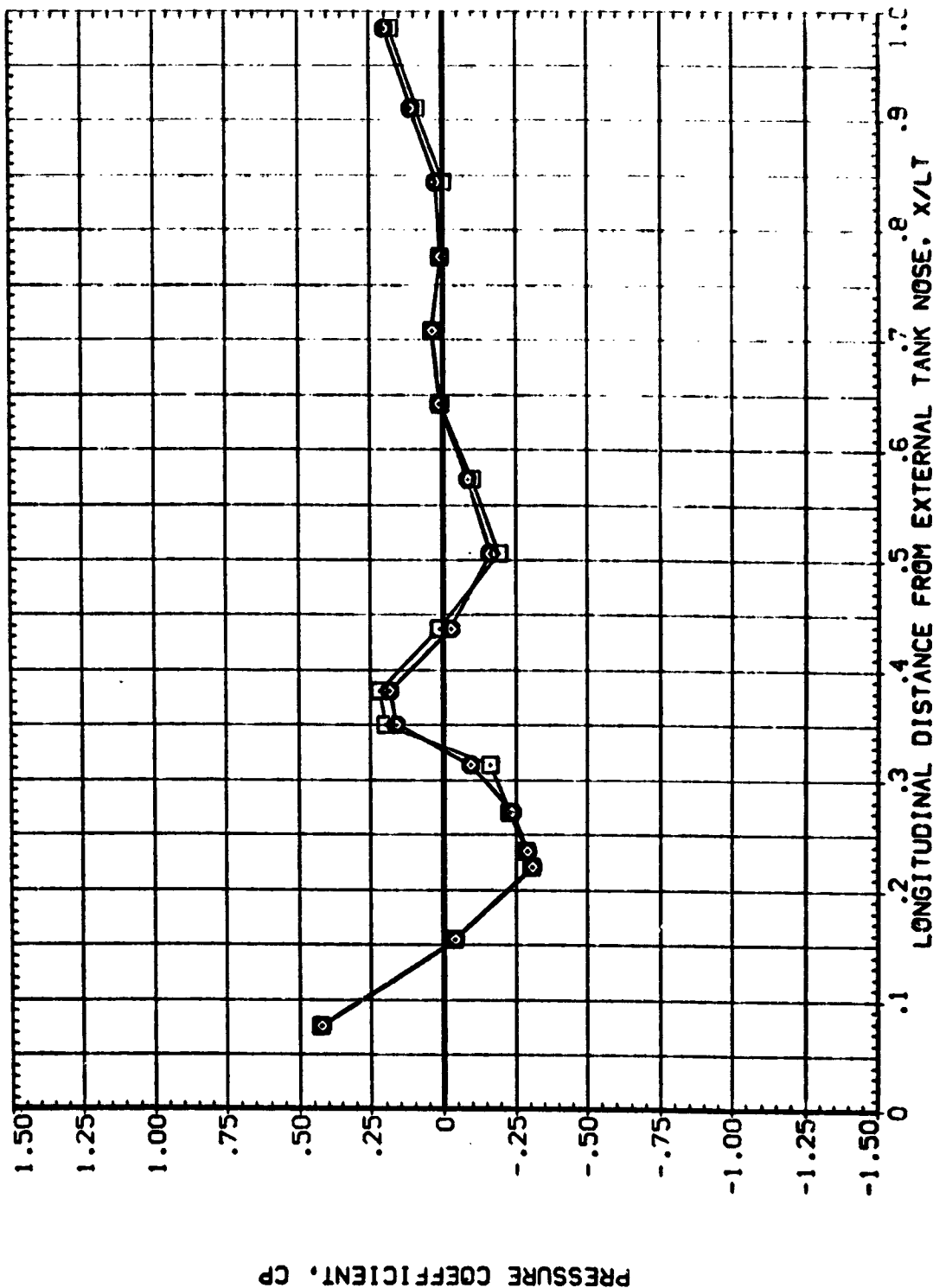
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SQ. IN.	BETA	CONF IG	90.000
○	108.000	.000	1.250	6.198	5.313	5.313	2.548	IN.	DELTA Z	RUDER	.000
□	126.000							IN.	X-SRB	CSB INC	.500
◇	144.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

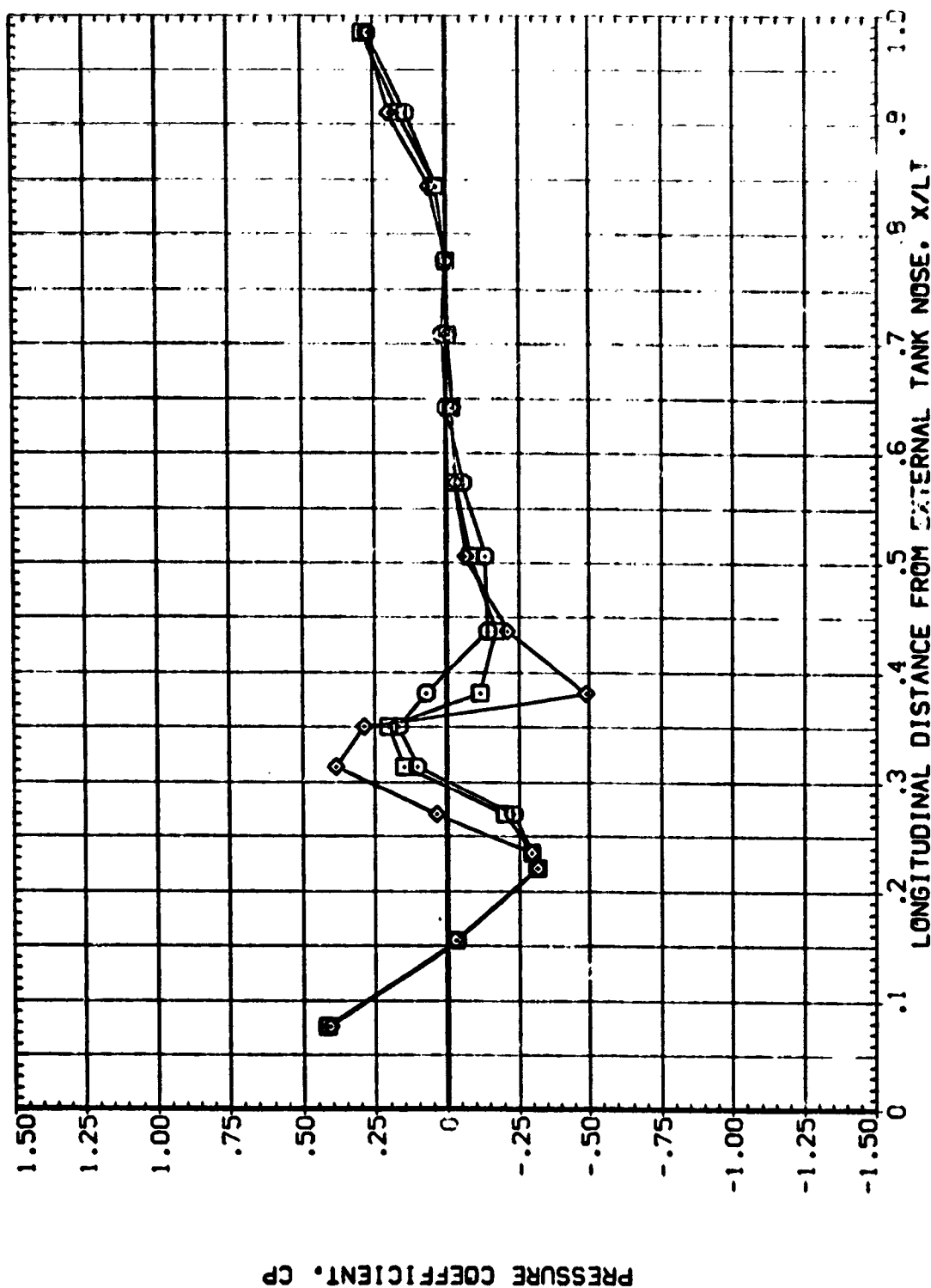
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETER VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	SQ. IN.	IN.
○	162.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.000	90.000	.000
□	180.000									.000	.000
◇	198.000									.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

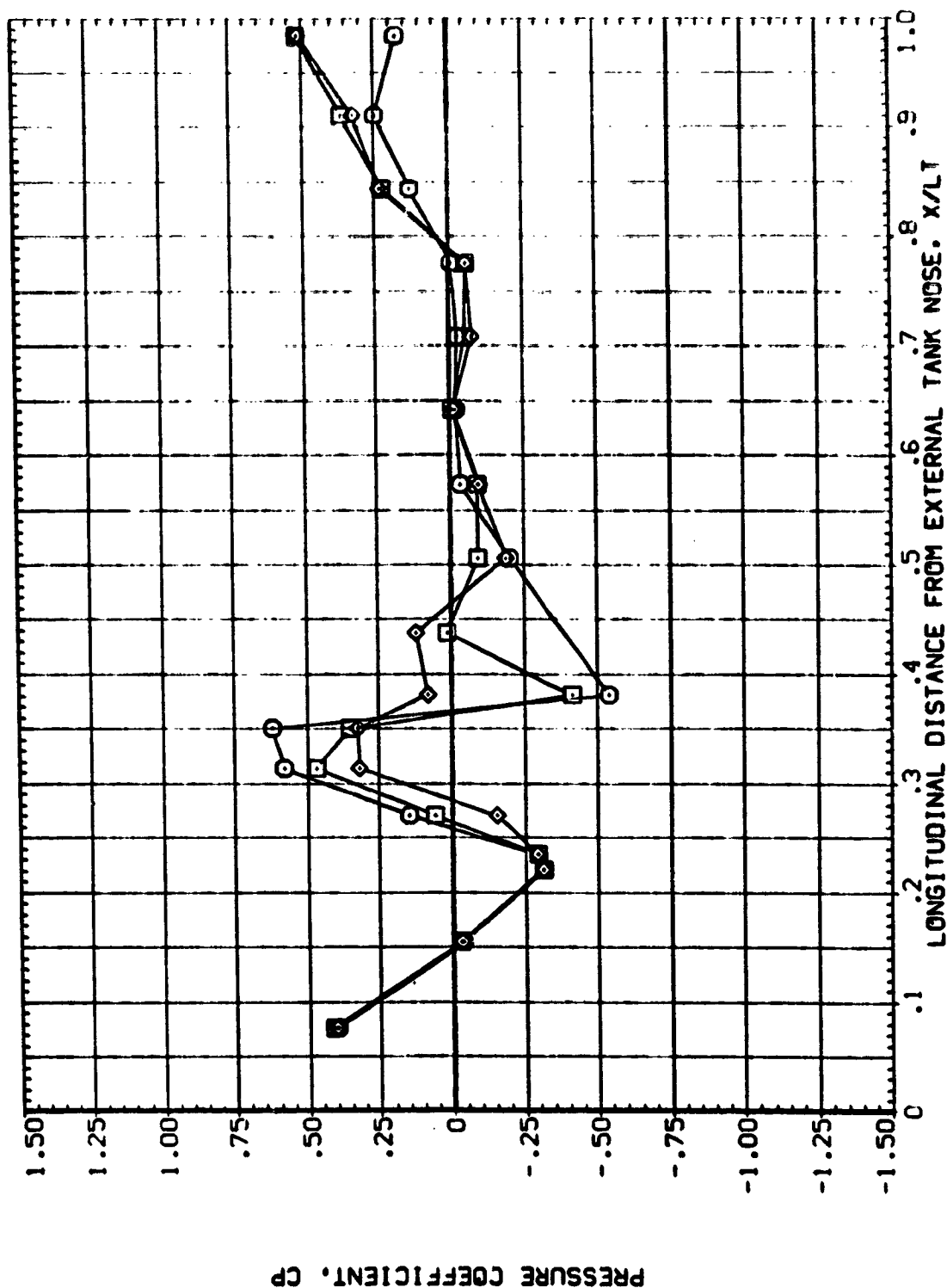
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZHREF	BETA	CONF	IG	
□	216.000	.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	RUDDER
◇	234.000							X-SRB	.000		0.951 NC
	252.000										.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

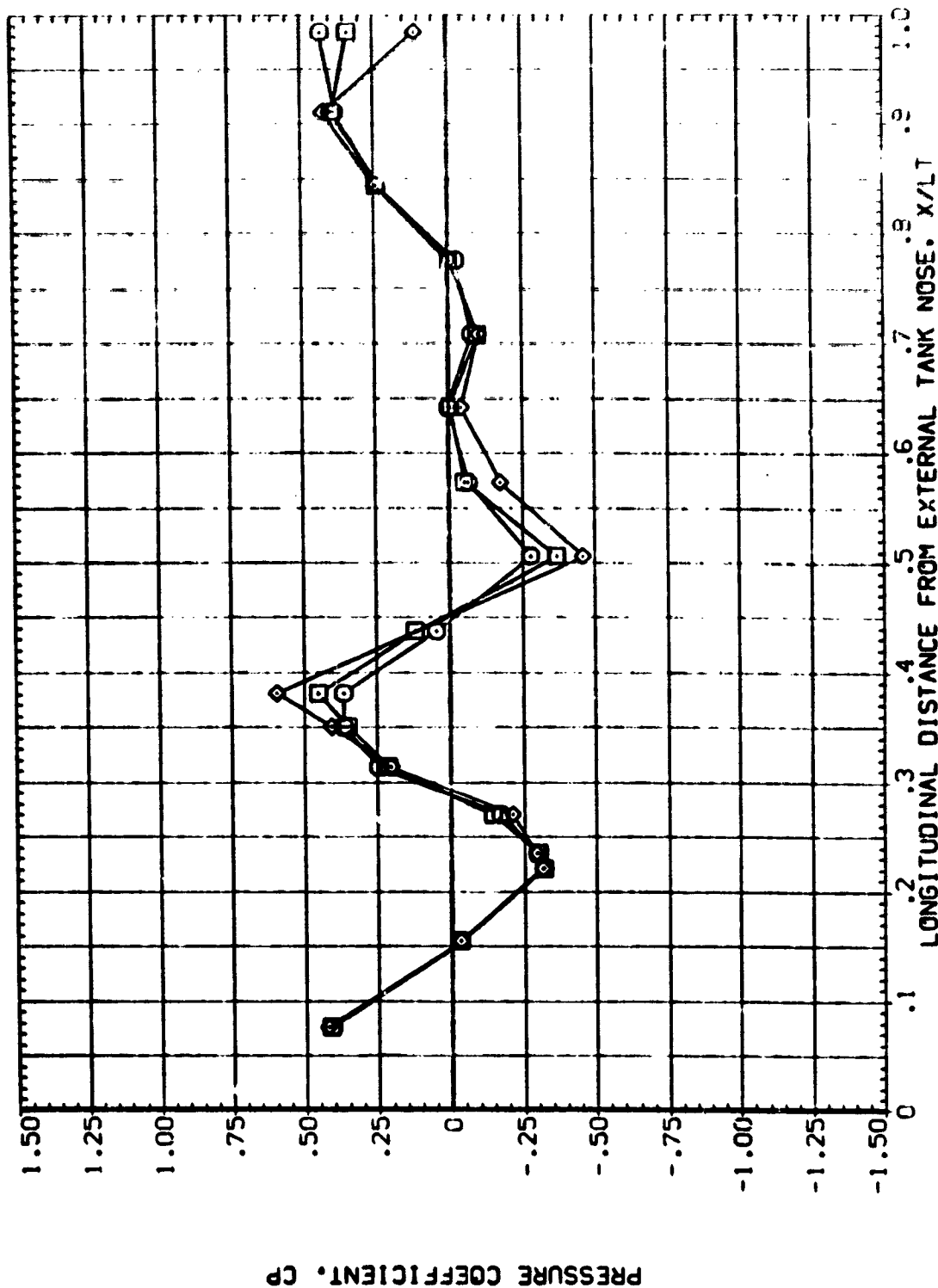
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	6.198	50. IN.	BETA	CONF 13
○	270.000	.000	1.250	5.313	5.313	1-598	.000	5.313	IN.	DELTA Z	.000
□	288.000			2.549	2.549	1-598	.000	2.549	IN.	RODIER	.000
◇	306.000			.000	.000	1-598	.000	.000	IN.	598 INC	.500
				ZMRP	ZMRP		.000	ZMRP			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

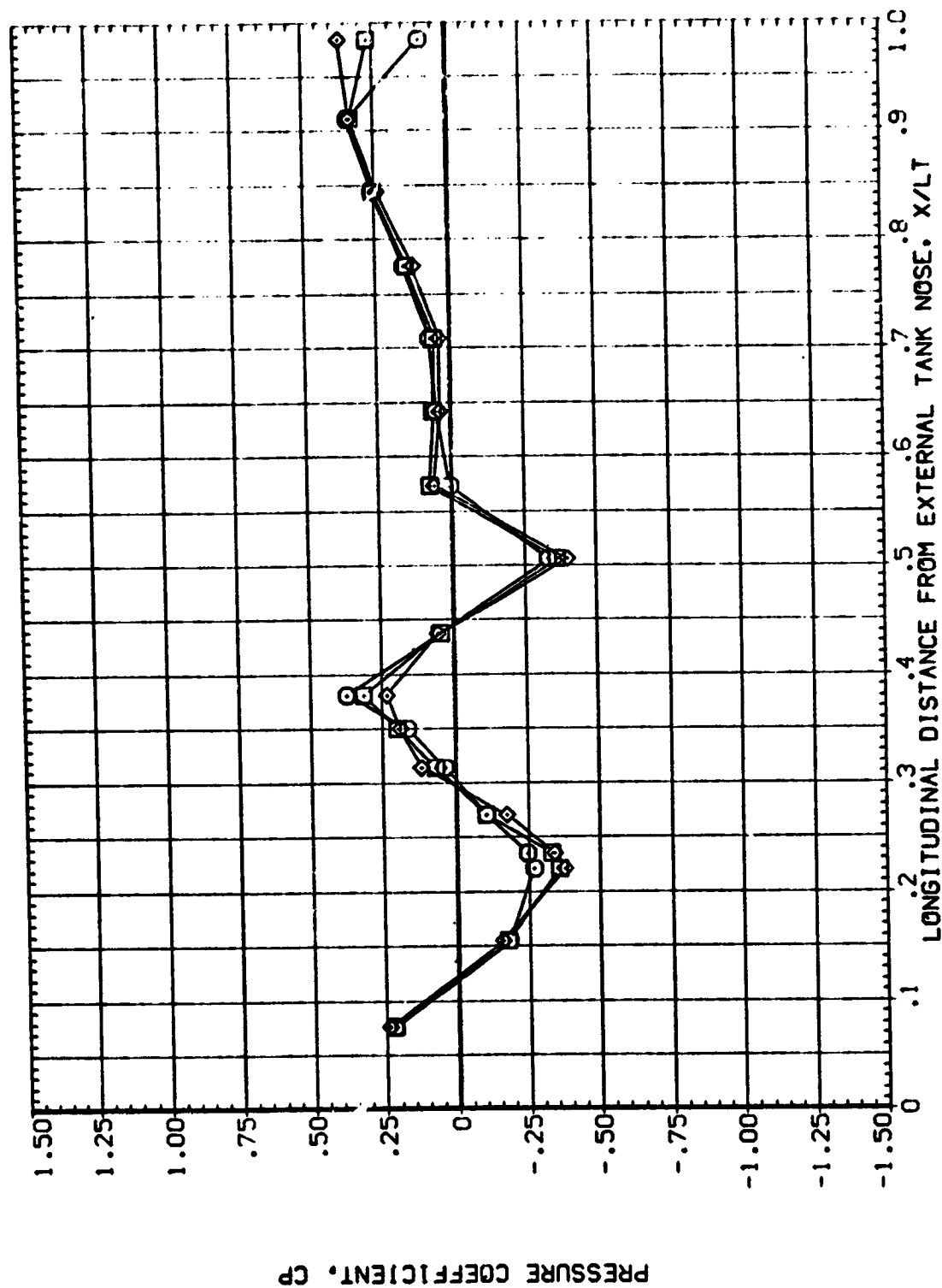
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		BETA		PARAMETRIC VALUES		
				SREF	6.198	50. IN.	DELTA Z	CONF IG	ALLOD	90.000
□	324.000	.000	1.250	LREF	5.313	IN.	DELTA Z	.000	.140	.000
◇	342.000			BREF	5.313	IN.	A-S98	.000	.000	.500
	360.000			VREF	2.549	IN.				
				VREF	.000	IN.				
				ZREF	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

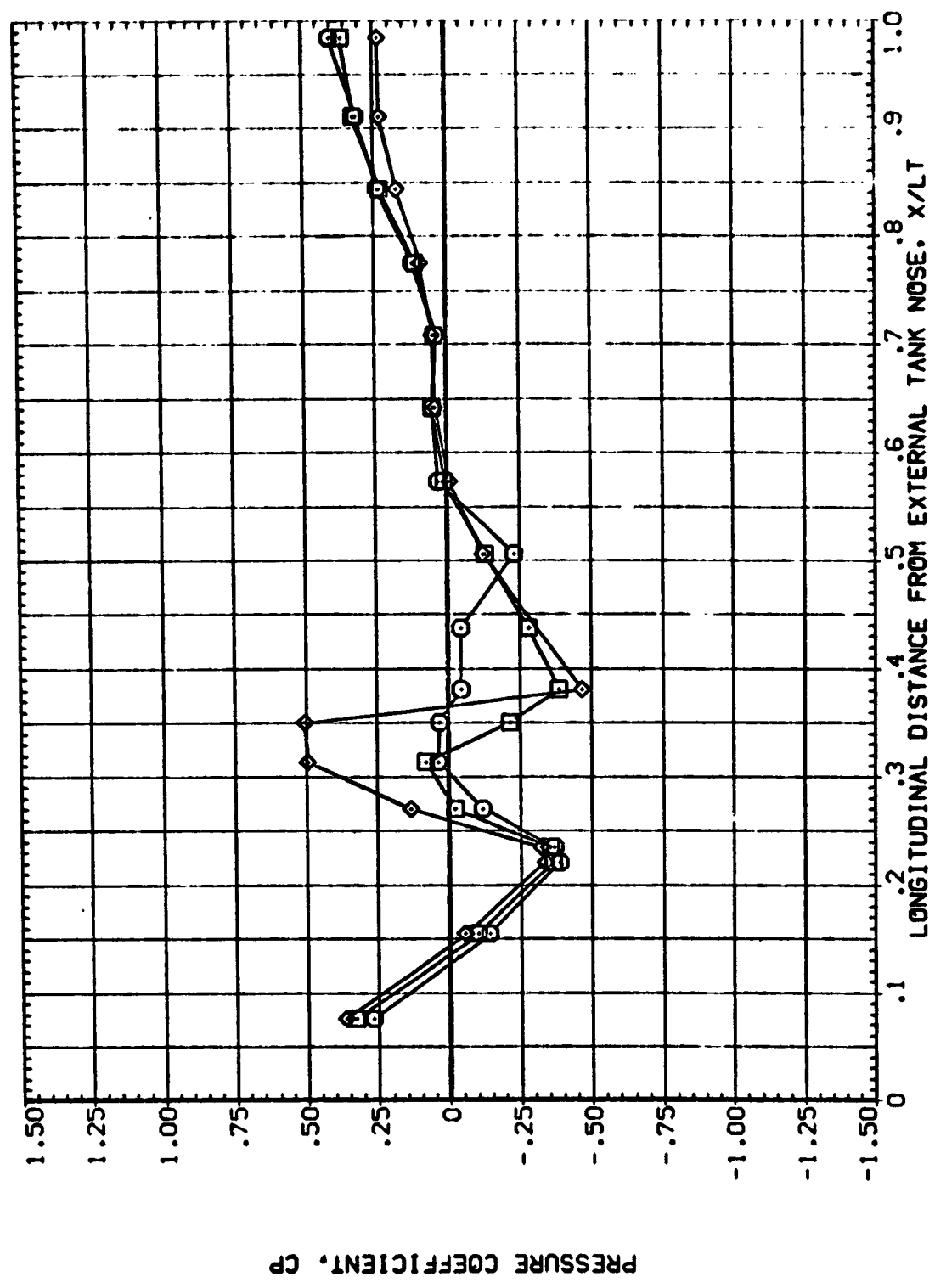
SYMBOL	PHI		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	.000	18.000	.000	9.000	.000	1.250	SREF	LREF	BREF	XMRP	YMRP	ZMRP	BETA	CONF IS
□							6.198	5.313	5.313	2.549	.000	.000	DELTA Z	.000
◇													X-SRB	.000
													ORGINC	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

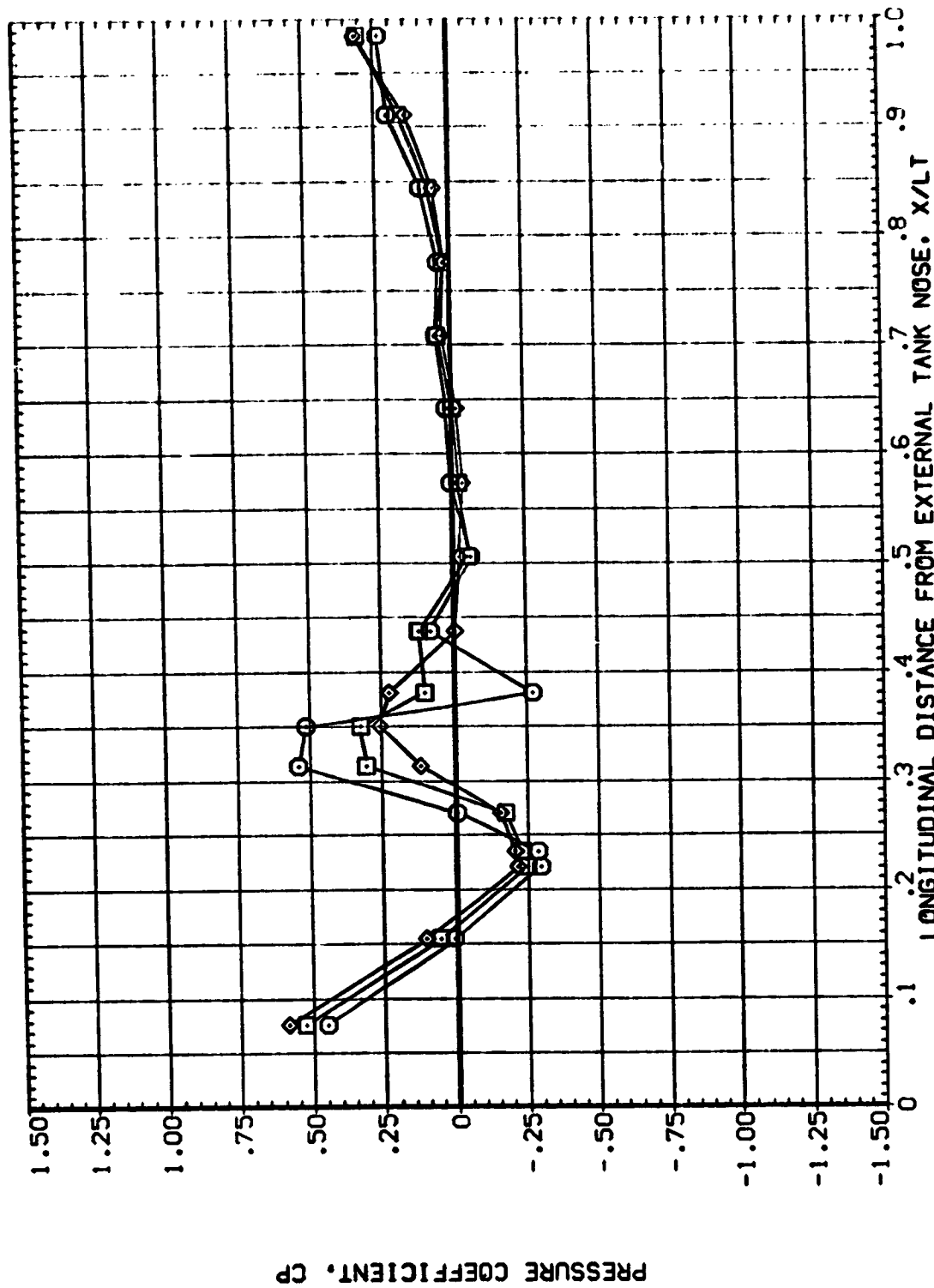
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	BETA	CONF IG	90,000
□	54.000	8.000	1.250	6.198	5.313	5.313	2.545	IN.	DELTA Z	.140	.000
◇	72.000							IN.	X-SRB	.000	.000
◇	90.000							IN.			.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	RUDER	ORBITAL
○	108.000	8.000	1.250	5.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	126.000							X-SRB	.000	.000	.000
◇	144.000										.500

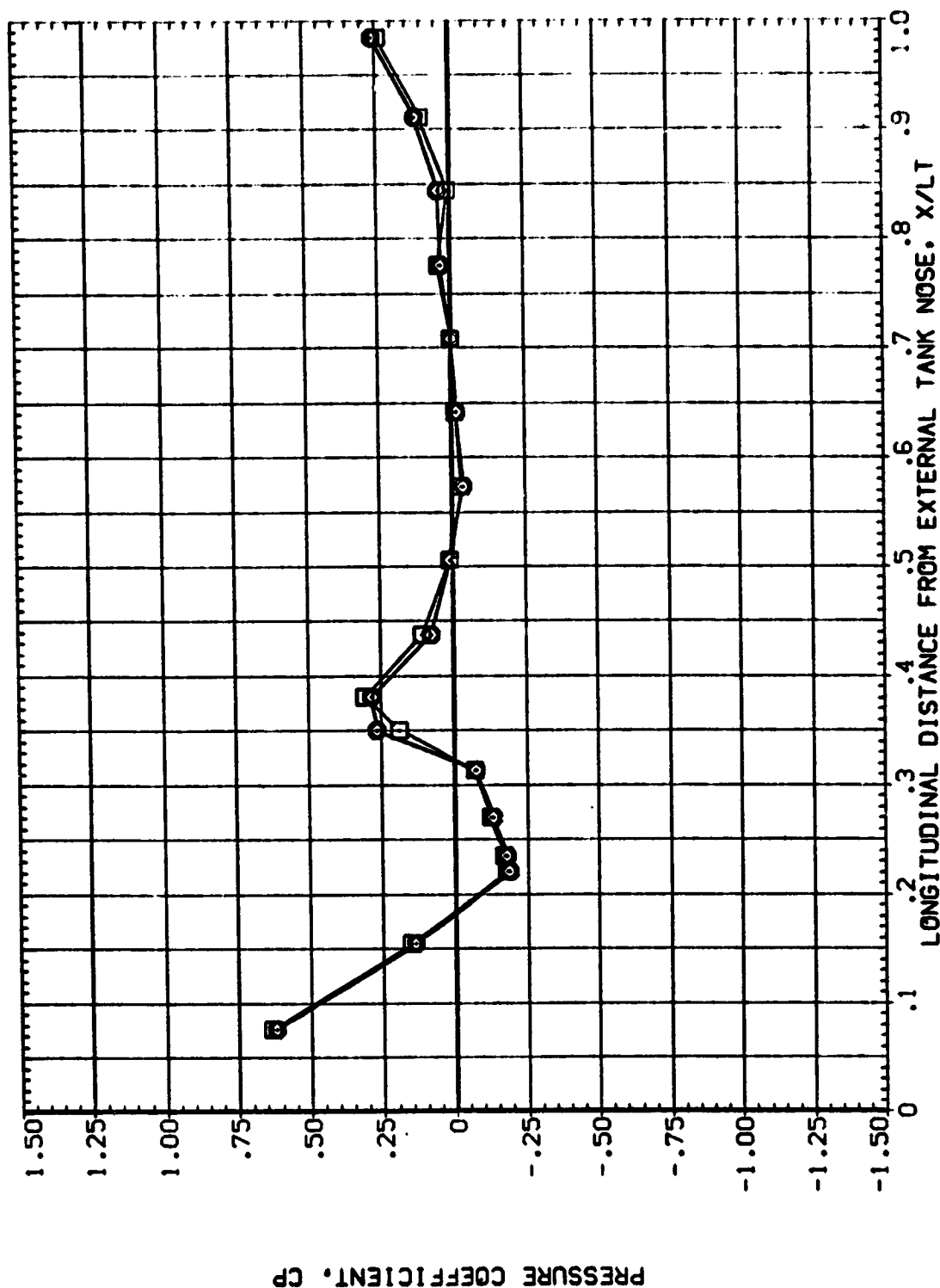


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

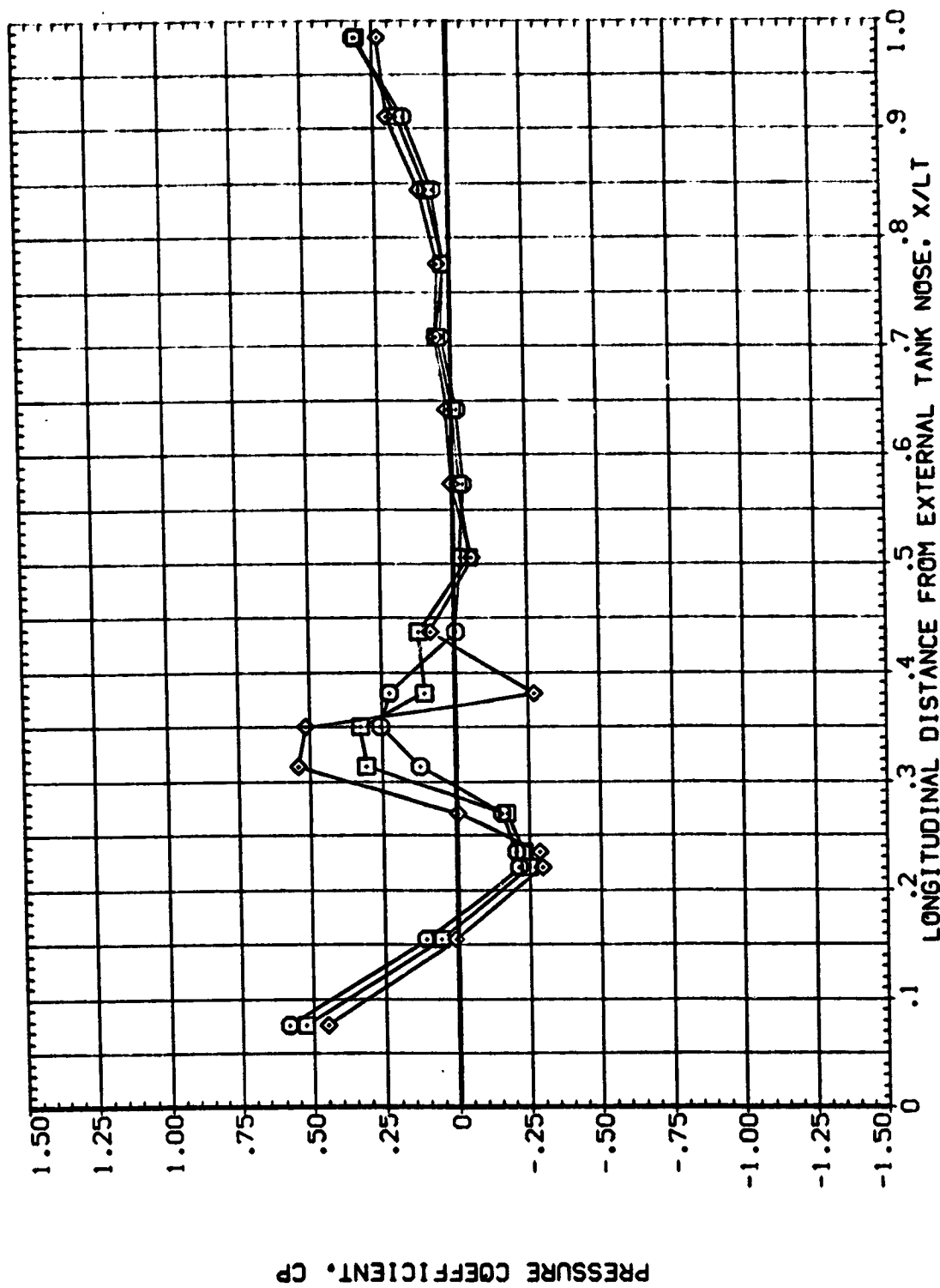
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO, IN.	BETA	CONFIG	90, DEG
○	162.000	8.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	RLODER	.000
□	180.000							IN.	X-SRB	ORBIT INC	.000
◇	198.000							IN.			.500
								IN.			.500
								IN.			.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	RUDDER	ORBITAL
○	216.000	8.000	1.250	6.198	5.313	5.313	.000	.000	.000	.140	.000
□	234.000			2.549			.000	DELTA Z			
◇	252.000						.000	X-SRB			

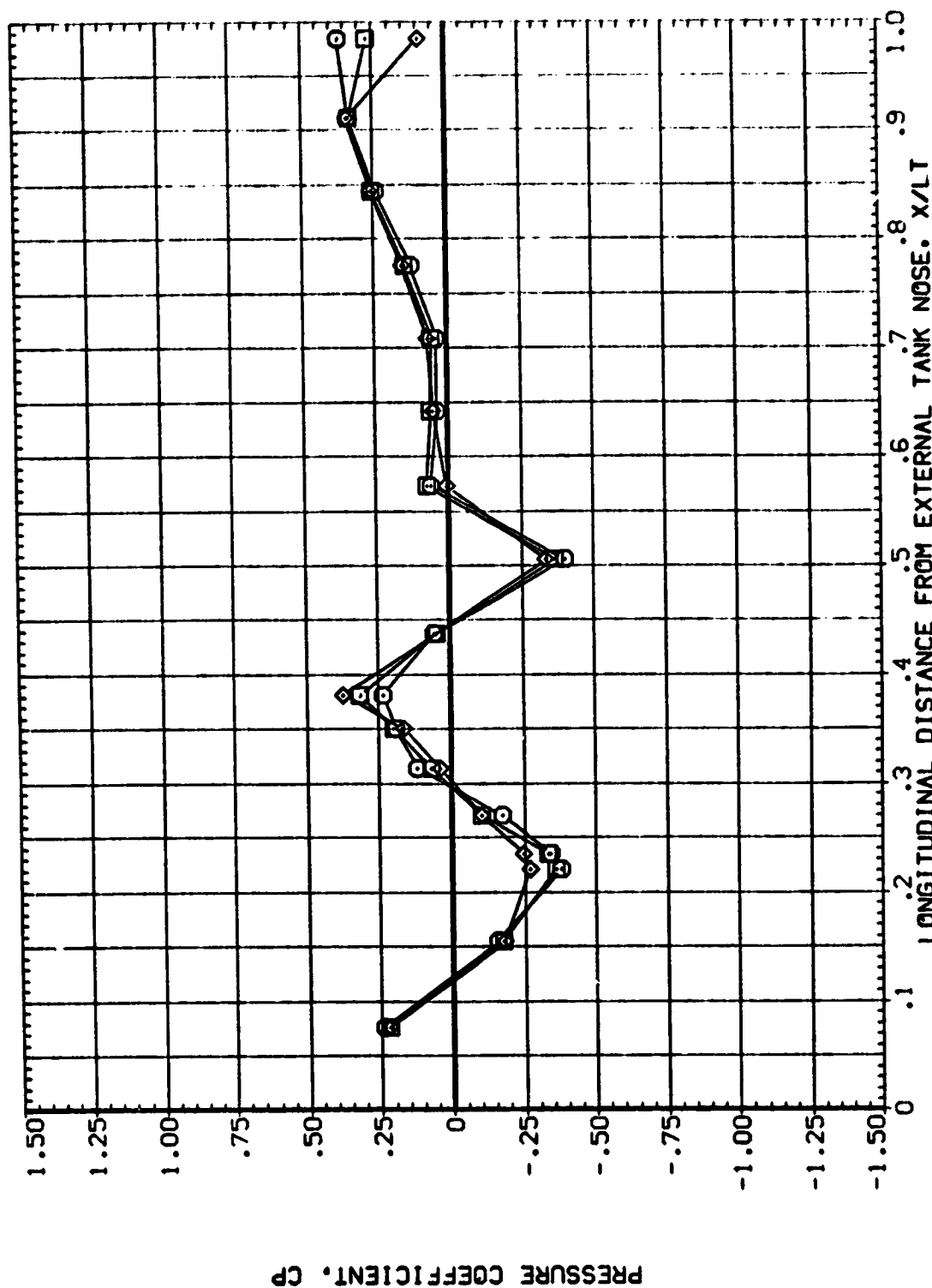


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

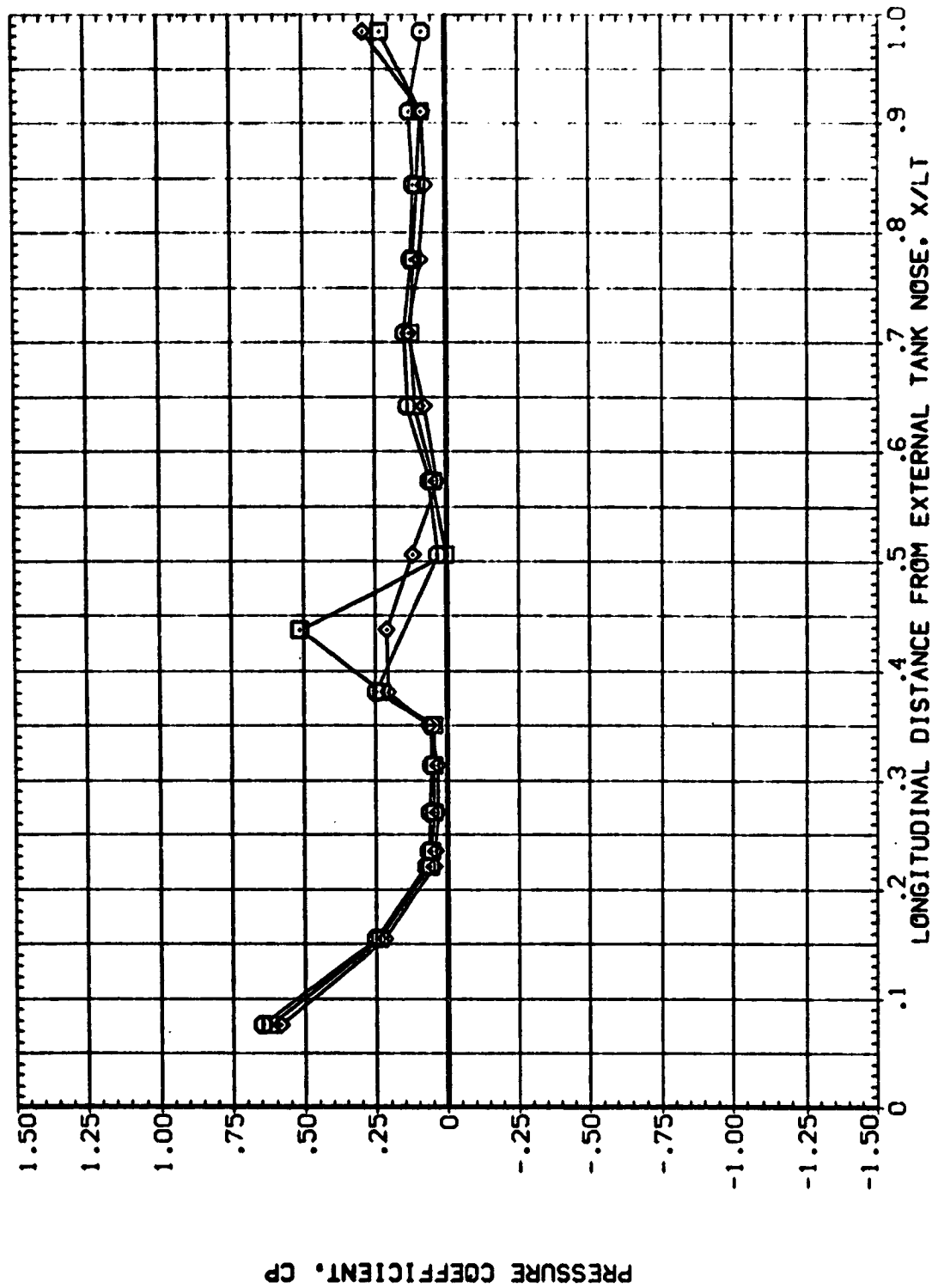
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONF IG	CONF IG	CONF IG
○	324.000	8.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
□	342.000							X-SRB	.000	.000	.500
◇	360.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SO. IN.	BETA	CONFIG	
○	.000	-8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	90.000
◇	18.000							IN.	X-SRB	.140	.000
□	36.000							IN.		.000	.500
								IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

**SYMBOL**   

**PHI**  
**54.000**  
**72.000**  
**90.000**

ALPHA	MAG:
-8,000	3,500

**MAC:**  
**3.500**

ALPHA  
-8,000

**PHI**  
**54.000**  
**72.000**  
**90.000**

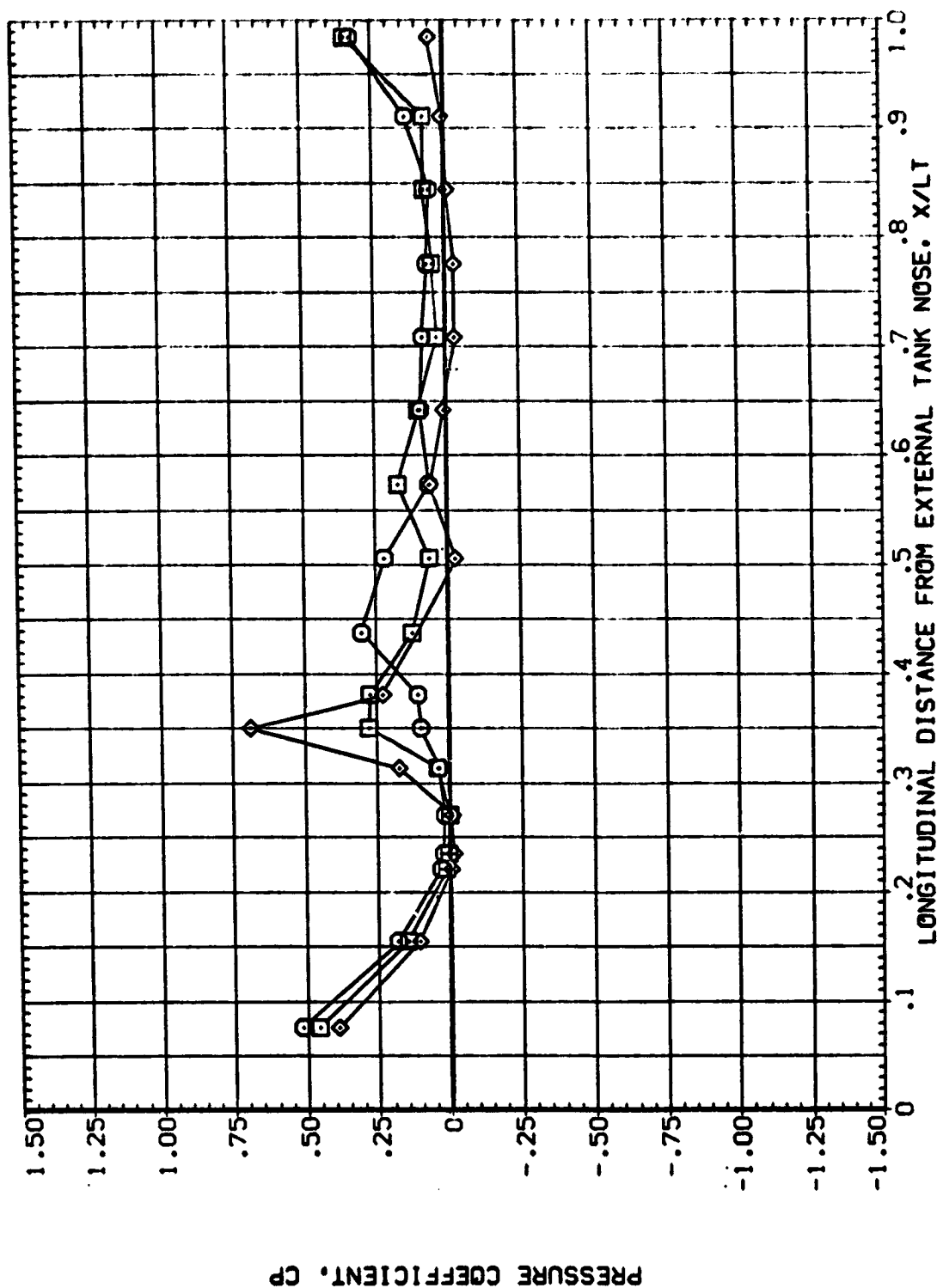
REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

[illegible]

BETA  
DELTA Z  
X-508

### PARAMETRIC VALUES

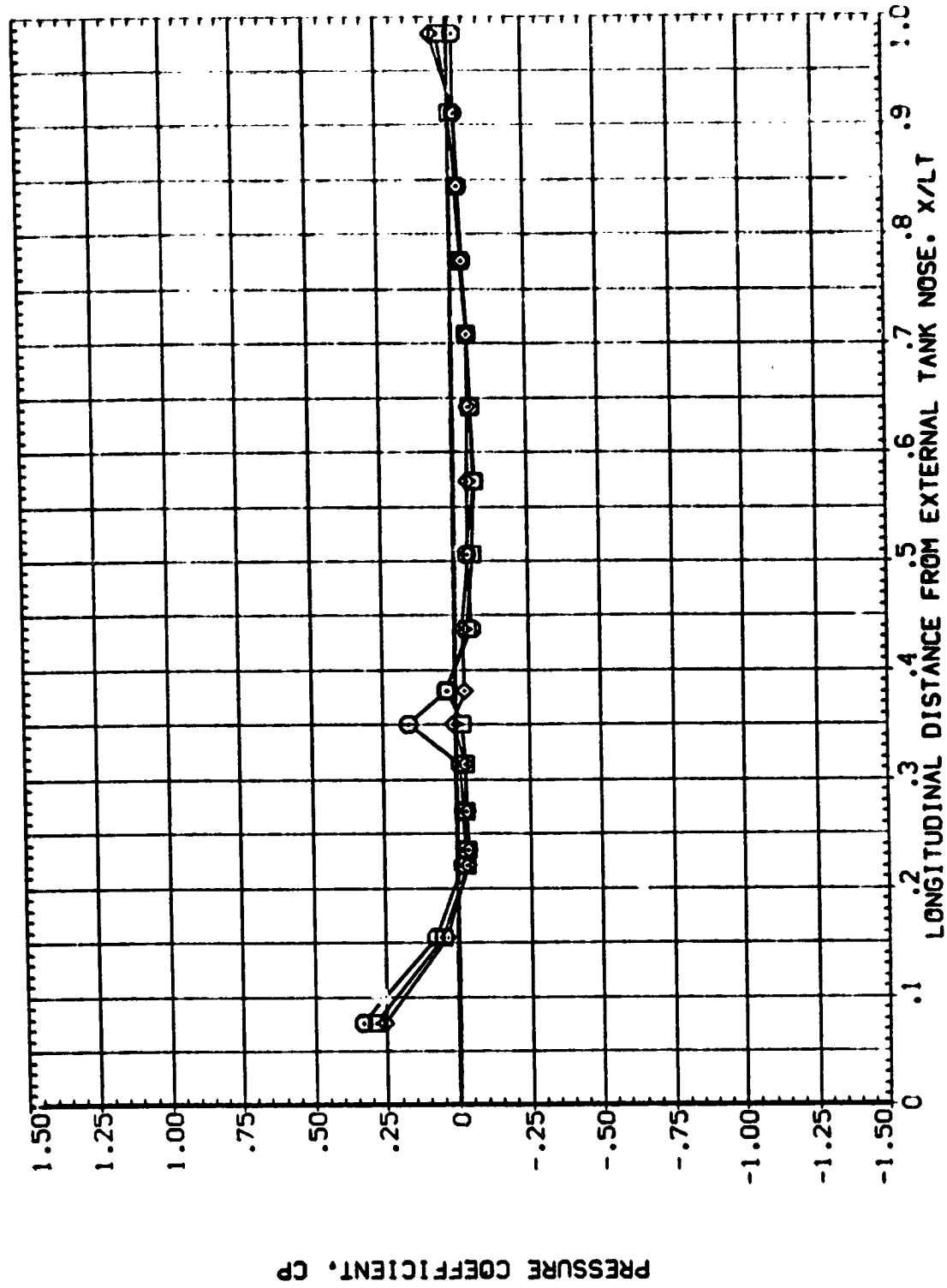
005.  
000.  
000.06



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

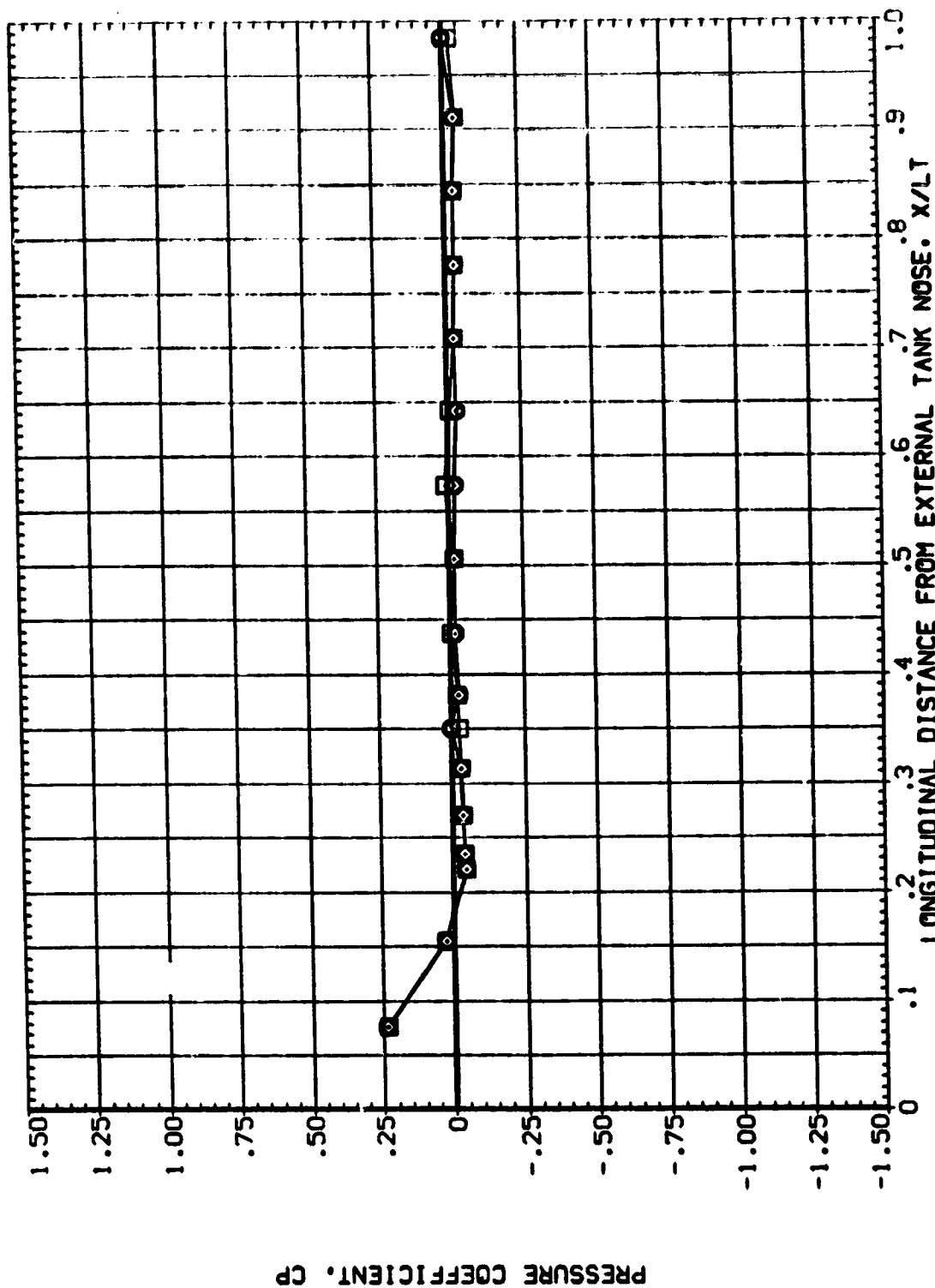
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	BETA	CONF IG	ALDIER	ORRINC
○	108.000	-8.000	3.500	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.500
□	126.000							X-SRB	.000	.000	.500
◇	144.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL	PHI		ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	162.000	180.000			SREF	LREF	BREF	XMRP	BETA	.000	CONF 16	90.000
○	162.000	180.000	-8.000	3.500	6.198	5.313	5.313	2.549	DELTA Z	.140	RUDER	.000
□	162.000	180.000	-8.000	3.500	6.198	5.313	5.313	2.549	X-SRB	.000	ORBITAL	.500
◇	162.000	180.000	-8.000	3.500	6.198	5.313	5.313	2.549				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 PNI  
 216.000  
 234.000  
 252.000

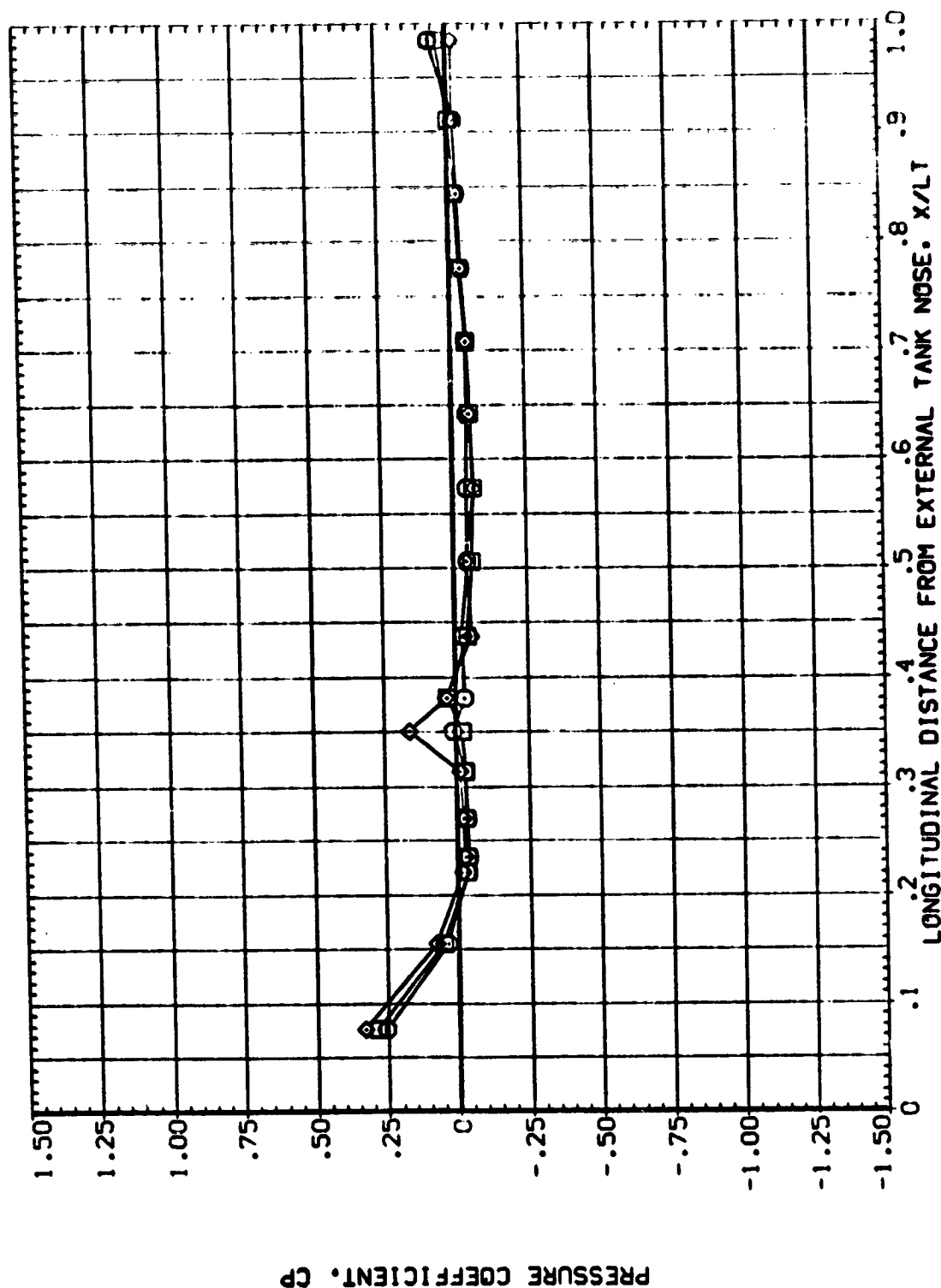
ALPHA  
 -8.000  
 MACH  
 3.500

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA Z  
 1-SRB

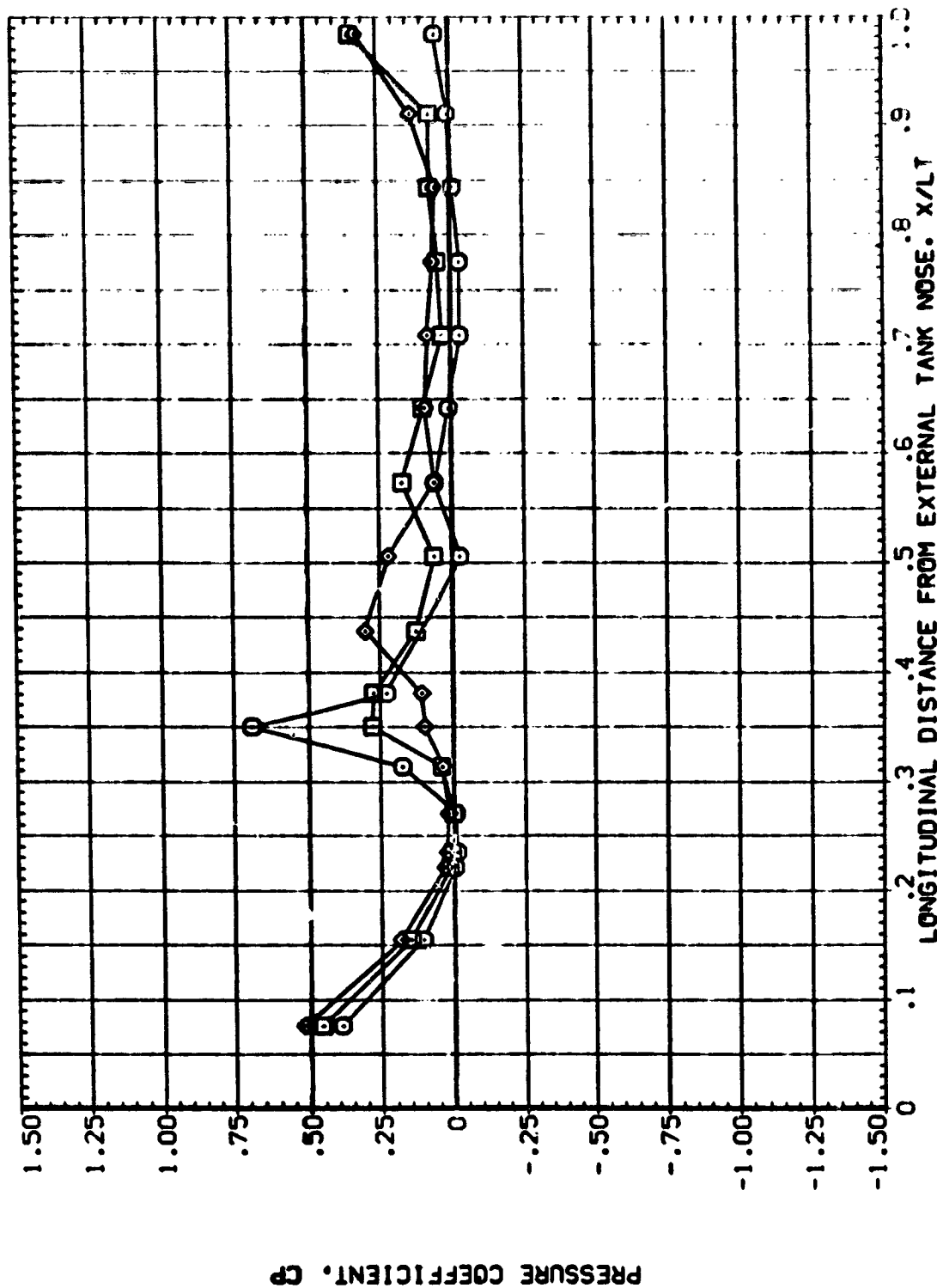
PARAMETRIC VALUES  
 .000  
 .140  
 .000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

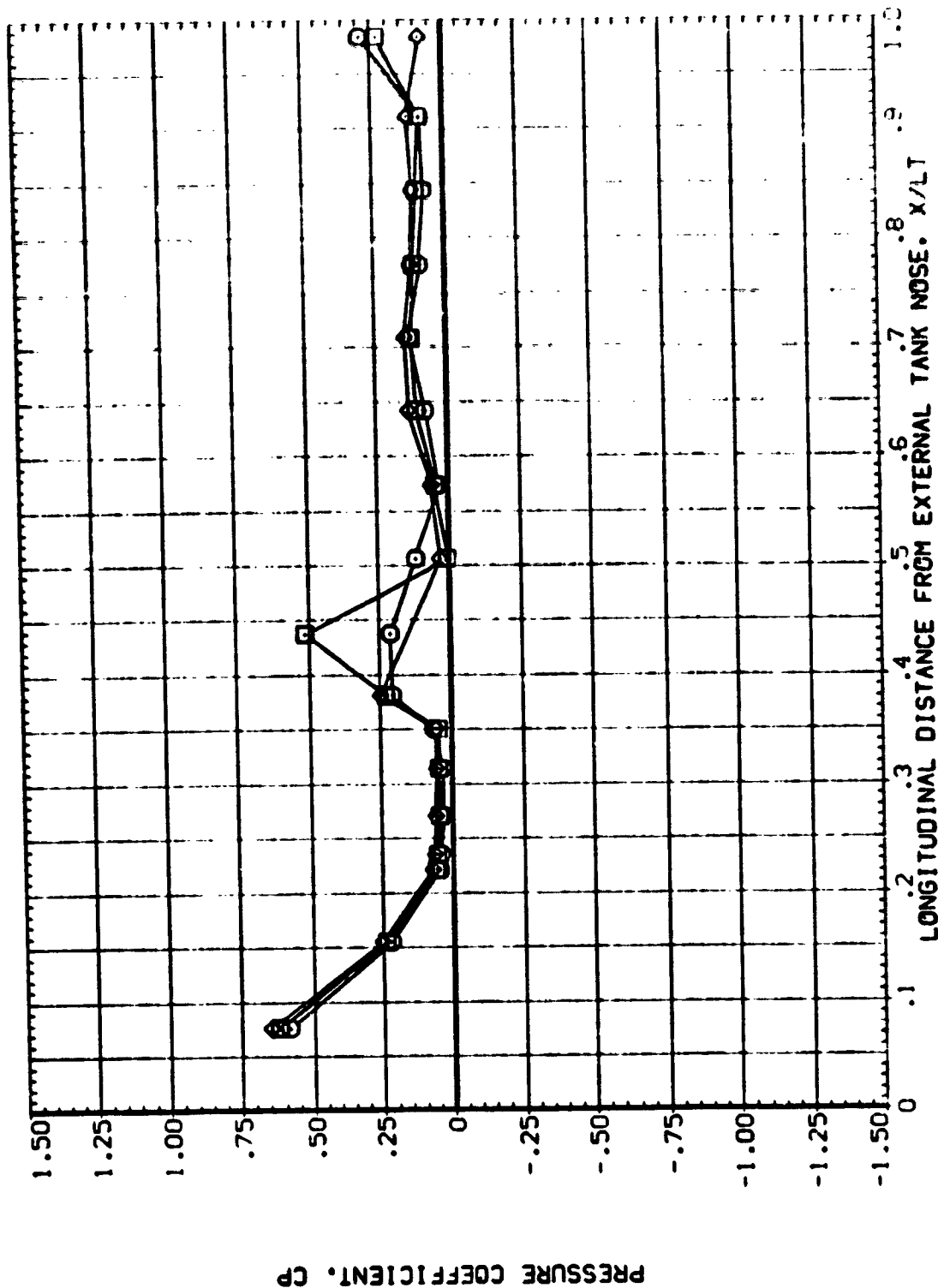
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD, IN.	BETA	DELTA Z	K-SRB
○	270.000	-8.000	3.500	5.198	5.313	5.313	2.549	IN.	.000	.14C	RLOOEP
□	288.000							IN.	.000	.000	DSBINE
◇	305.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

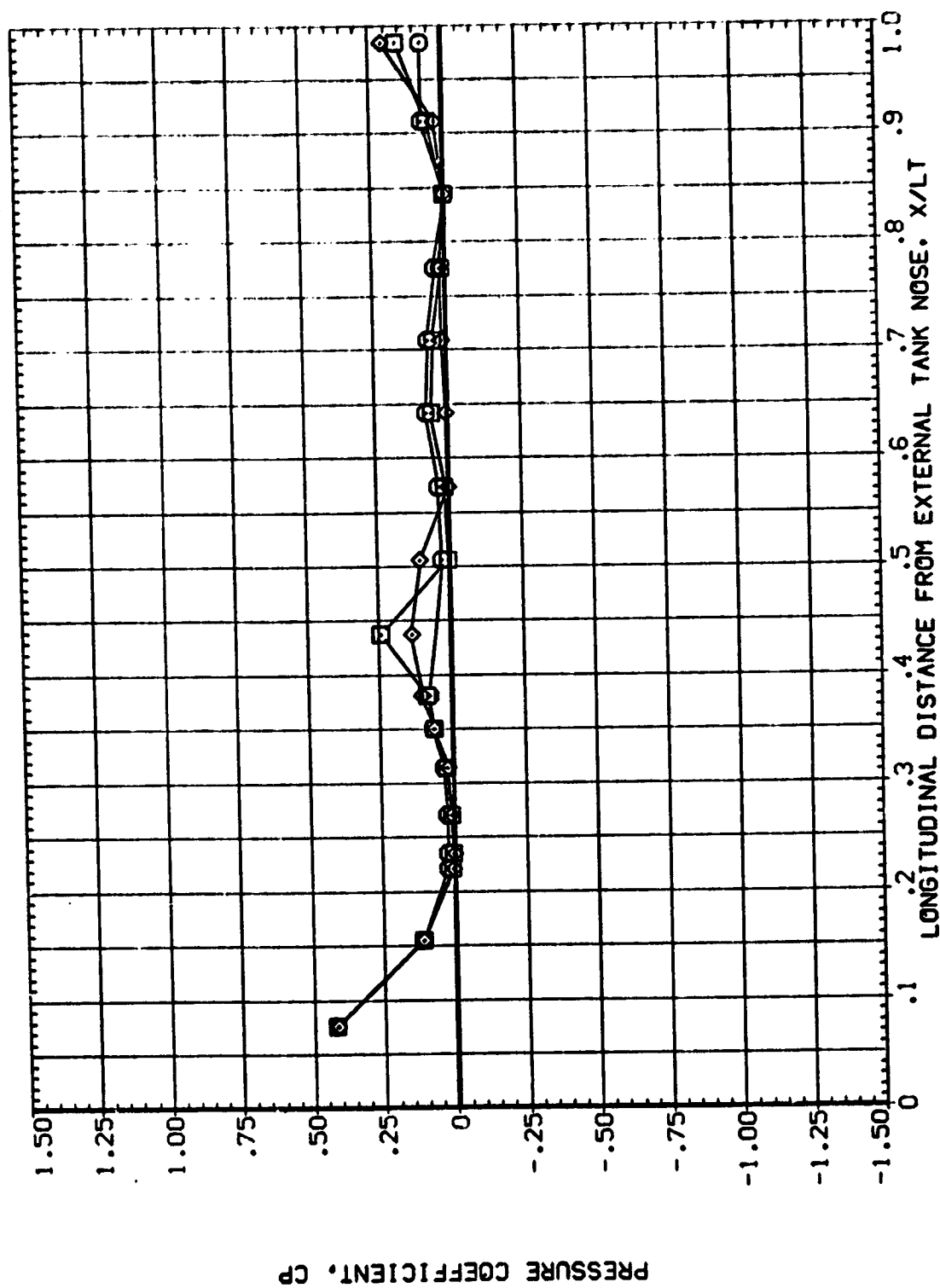
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA		BETA	PARAMETRIC VALUES		
				SREF	6.198		.000	CONFID	90.000
□	324.000	-8.000	3.500	LREF	5.313	DELTA Z	.000	BLUDDER	.000
◇	342.000			BREF	5.313	N-598	.000	398 INC	.500
	360.000			XMRP	2.549				
				YMRP	.000				
				ZMRP	.000				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SG. IN.	BETA	CONF IG	90.000
○	.000	.000	3.500	5.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	18.000							IN.	X-SRB	.140	.000
◇	36.000							IN.	ORB INC	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 □  
 ◇

PHI  
 54.000  
 72.000  
 90.000

ALPHA  
 .000  
 MACH  
 3.500

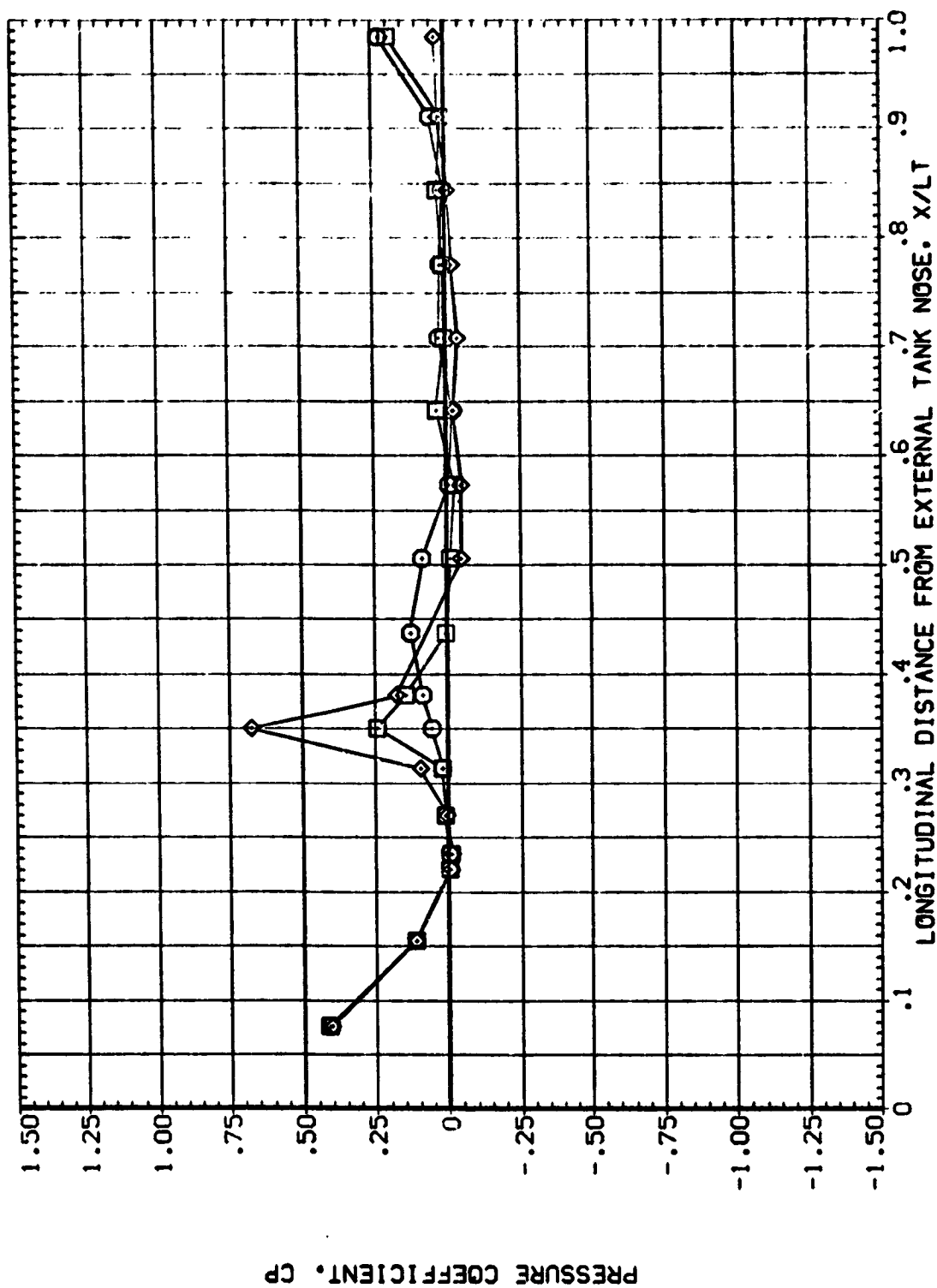
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 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000 CONFIS  
 .140 RUDDER  
 .000 CDSINC

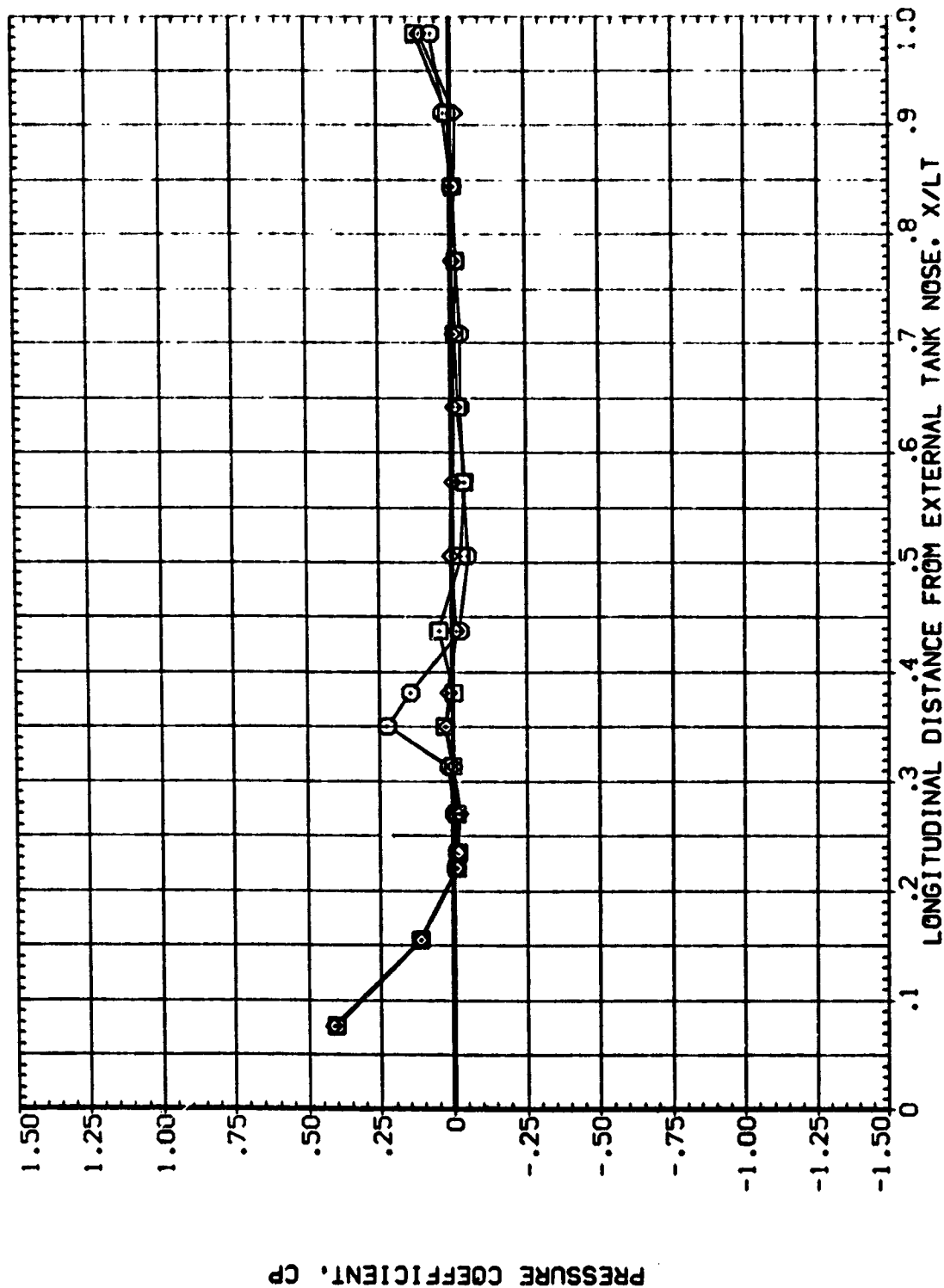
90.00  
 .00  
 .5



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	50. IN.	BETA	CONF IG	90.000		
□	108.000	.000	3.500	LREF	5.313	IN.	DELTA Z	.000	RJDDER	.000	
◇	126.000			BREF	5.313	IN.	X-SRB	.140	DRBINC	.500	
	144.000			XMRP	2.549	IN.		.000			
				YMRP	.000	IN.					
				ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

**Symbol** 

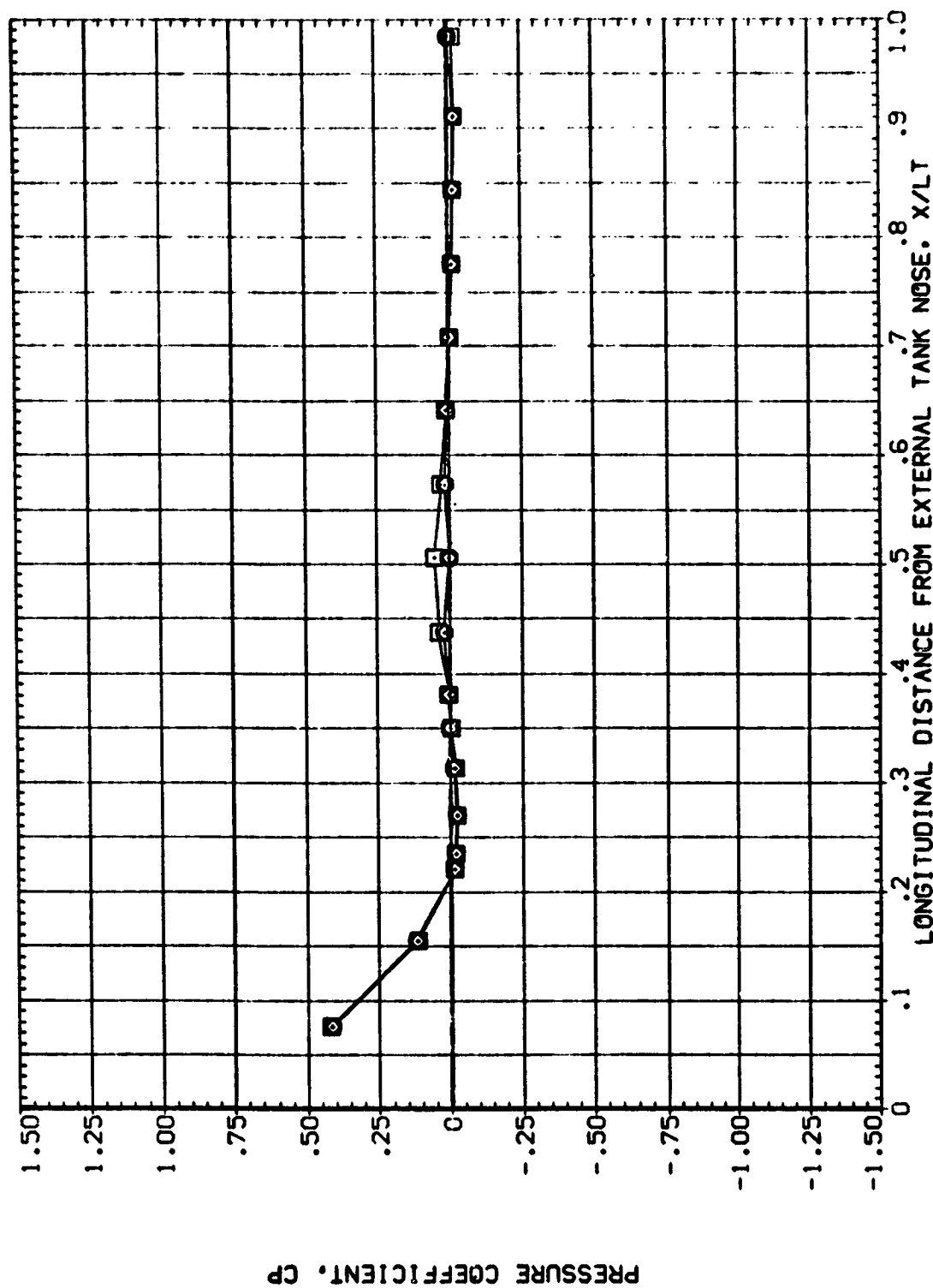
PHI  
162.000  
180.000  
198.000

ALPHA	MACH
.000	3.50

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

BETA	.000	CONFIG
DELTA Z	.14C	RUDDER
X-SRB	.00C	ORBNIC

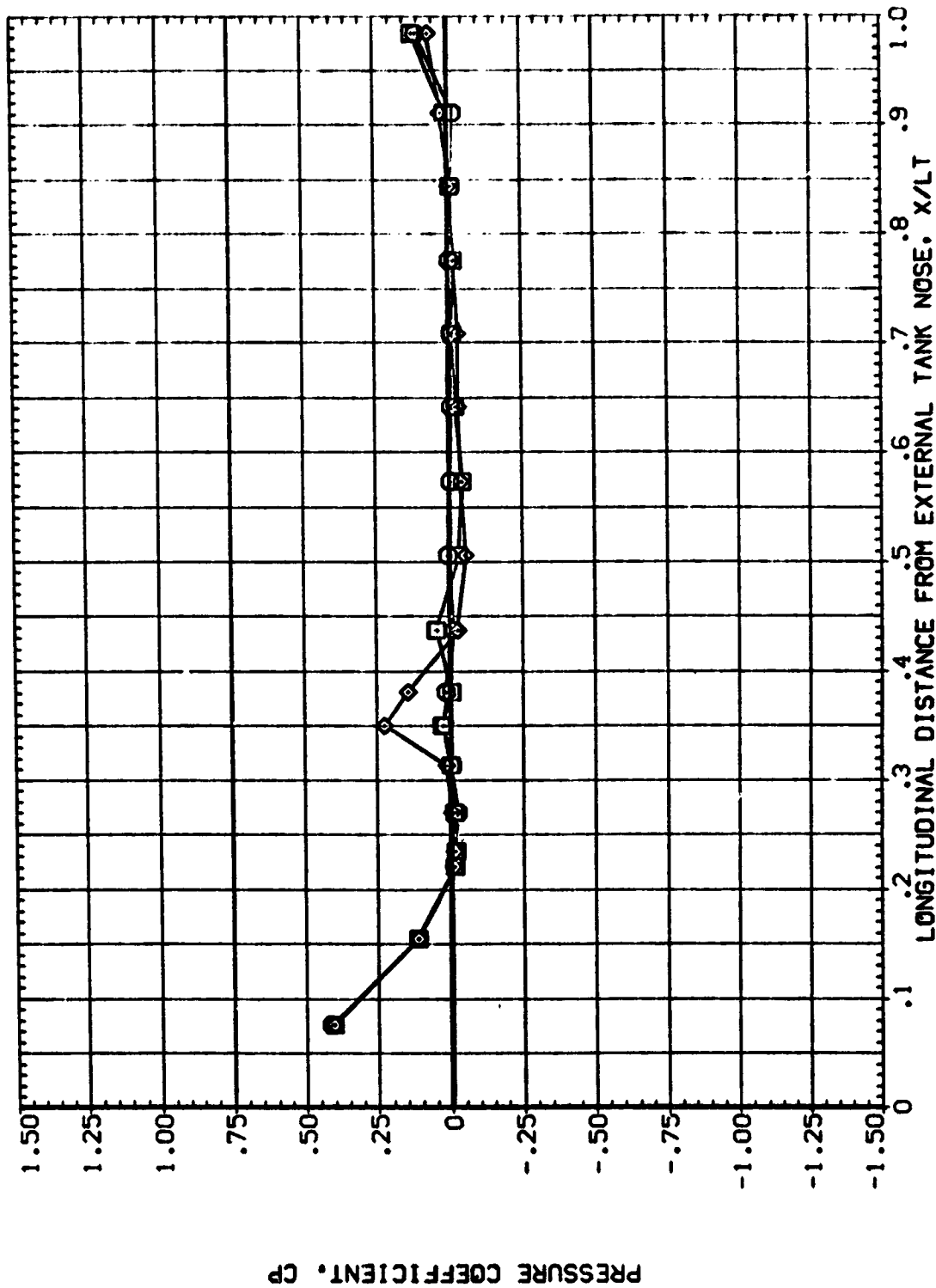
005.  
000.  
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PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	216.000	.000	3.500	SREF 5.198	.000	CONF IG 90.000
□	234.000			LREF 5.313	.140	R-ODER .000
◇	252.000			BREF 5.313	.000	9RB:NC .500
				XMRP 2.549		
				YMRP .000		
				ZMRP .000		

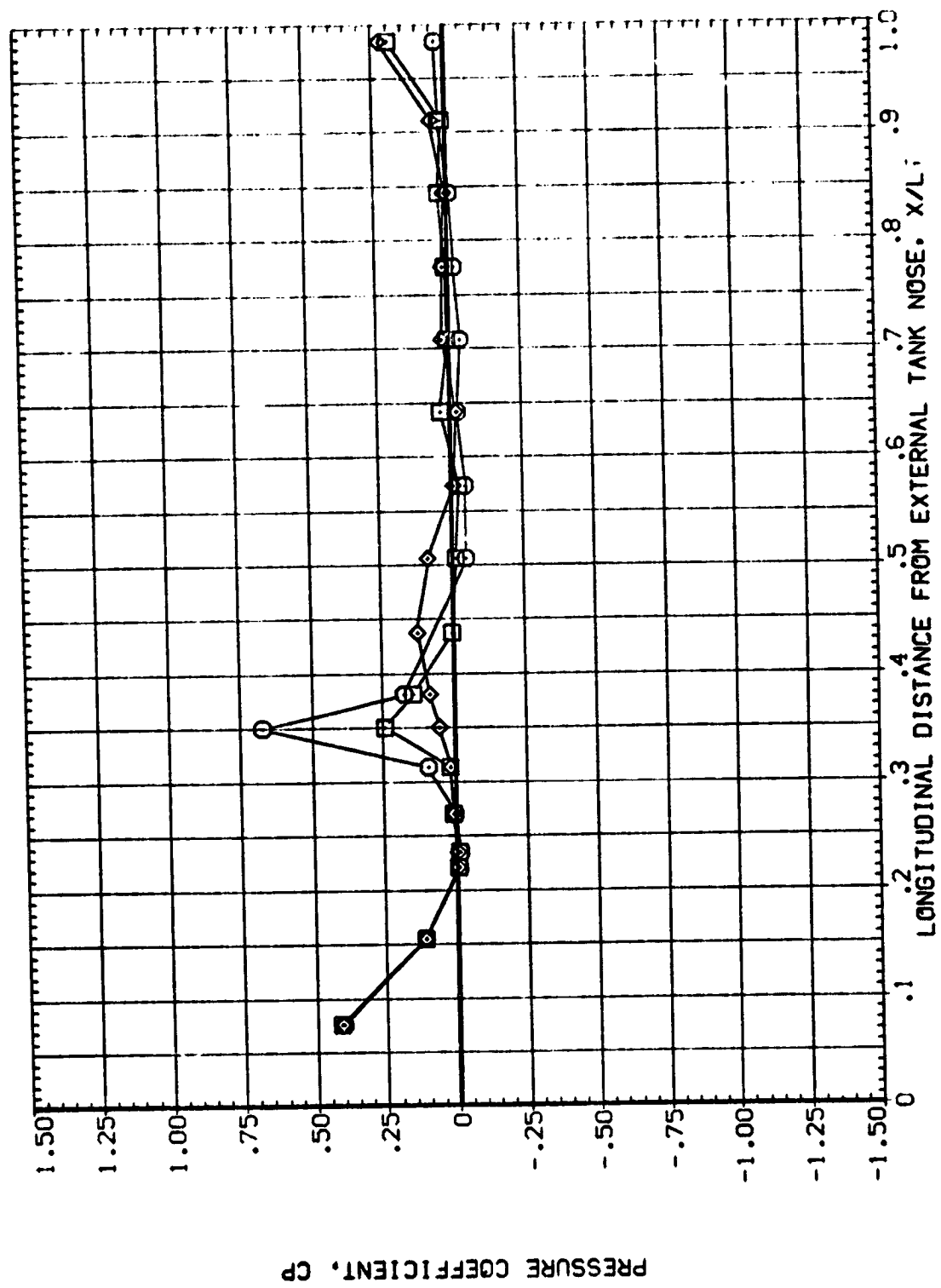


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

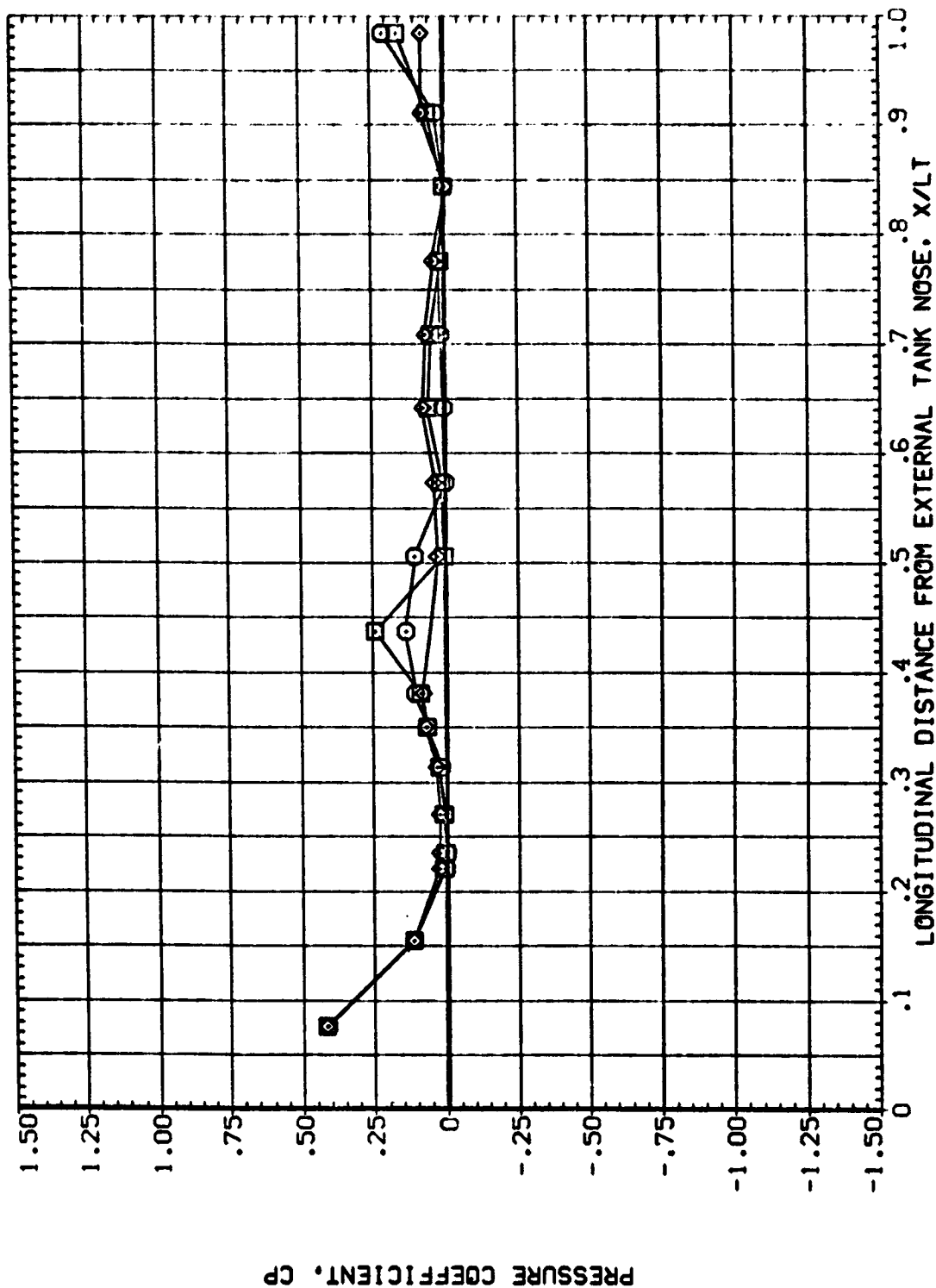
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SO. IN.	BETA	CONF IG
○	270.000	.000	3.500	6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	.000
□	288.000								IN.	X-SRB	.140
◇	306.000								IN.	RUDER	.000
										ORB INC	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

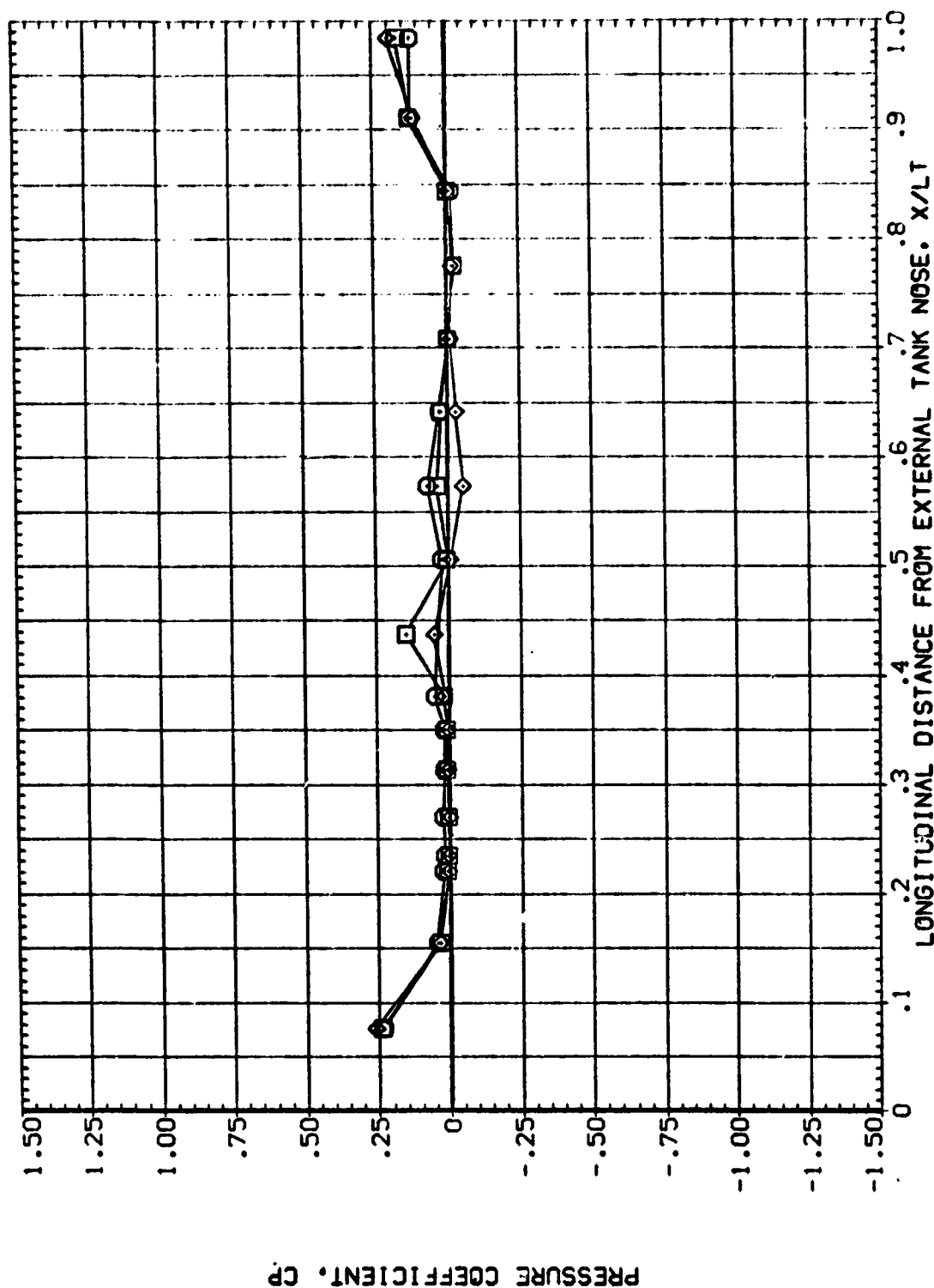
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	BETA	CONF IG	90.000
○	324.000	.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	342.000							IN.	X-SRB	.000	.000
◇	360.000							IN.		.000	.500
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82T05)

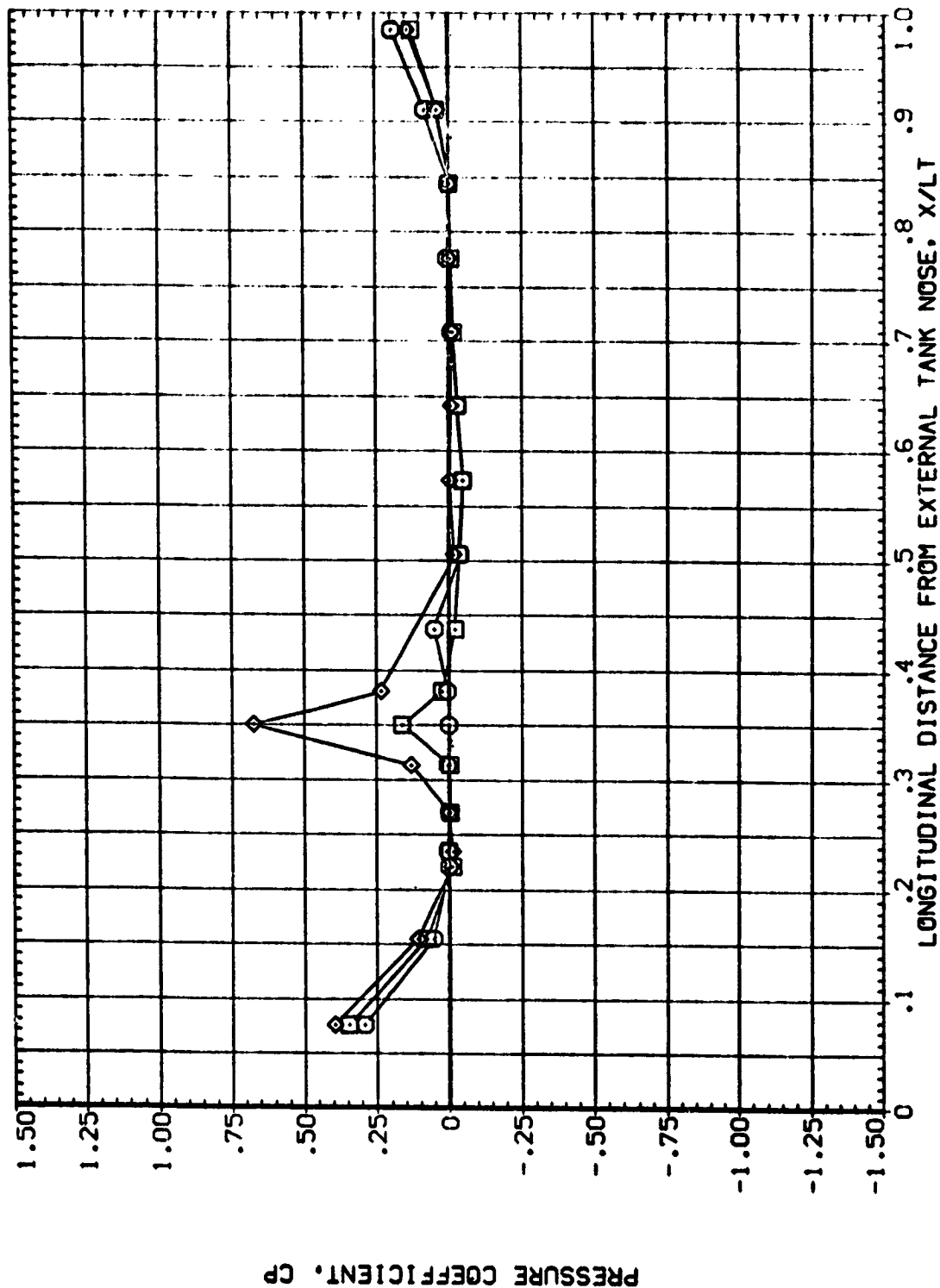
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	XRFP	ZMRP	BETA	CONF IG	RUDDER	ORBIT INC
○	.000	8.000	3.500	5.198	5.313	2.549	.000	DELTA Z	.000	.140	.000
□	18.000							X-SRB	.000	.000	.500
◇	36.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

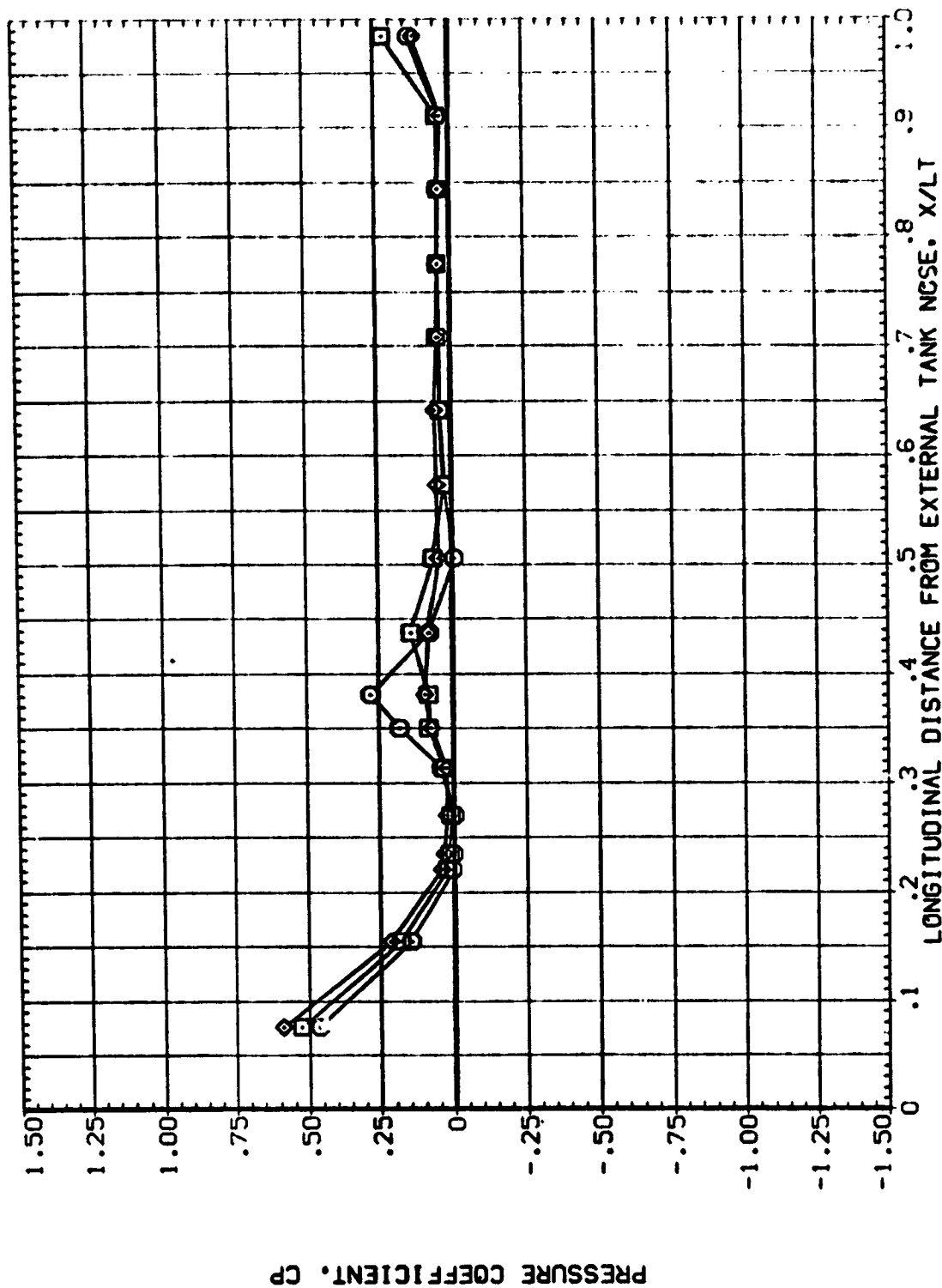
SYMBOL	PMI	ALPHA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	LREF	BREF	BETA	CONFIG	90.000
□	54.000	8.000	3.500	6.198	5.313	5.313	DELTA Z	.000	.000
◇	72.000			2.549	2.549	2.549	X-SRB	.140	.000
◇	90.000			.000	.000	.000		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	SO. IN.	BETA	.000	CONFIG	90.000	
○	108.000	8.000	3.500	LREF	5.313	IN.	DELTAZ	.140	RUDDER	.000	
□	126.000			BREF	5.313	IN.	X-SRB	.000	ORBIT INC	.500	
◇	144.000			XMRP	2.549	IN.					
				YMRP	.000	IN.					
				ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ◇  
 □  
 ◇

PHI  
 162.000  
 180.000  
 198.000

ALPHA  
 8.000  
 MACH  
 3.500

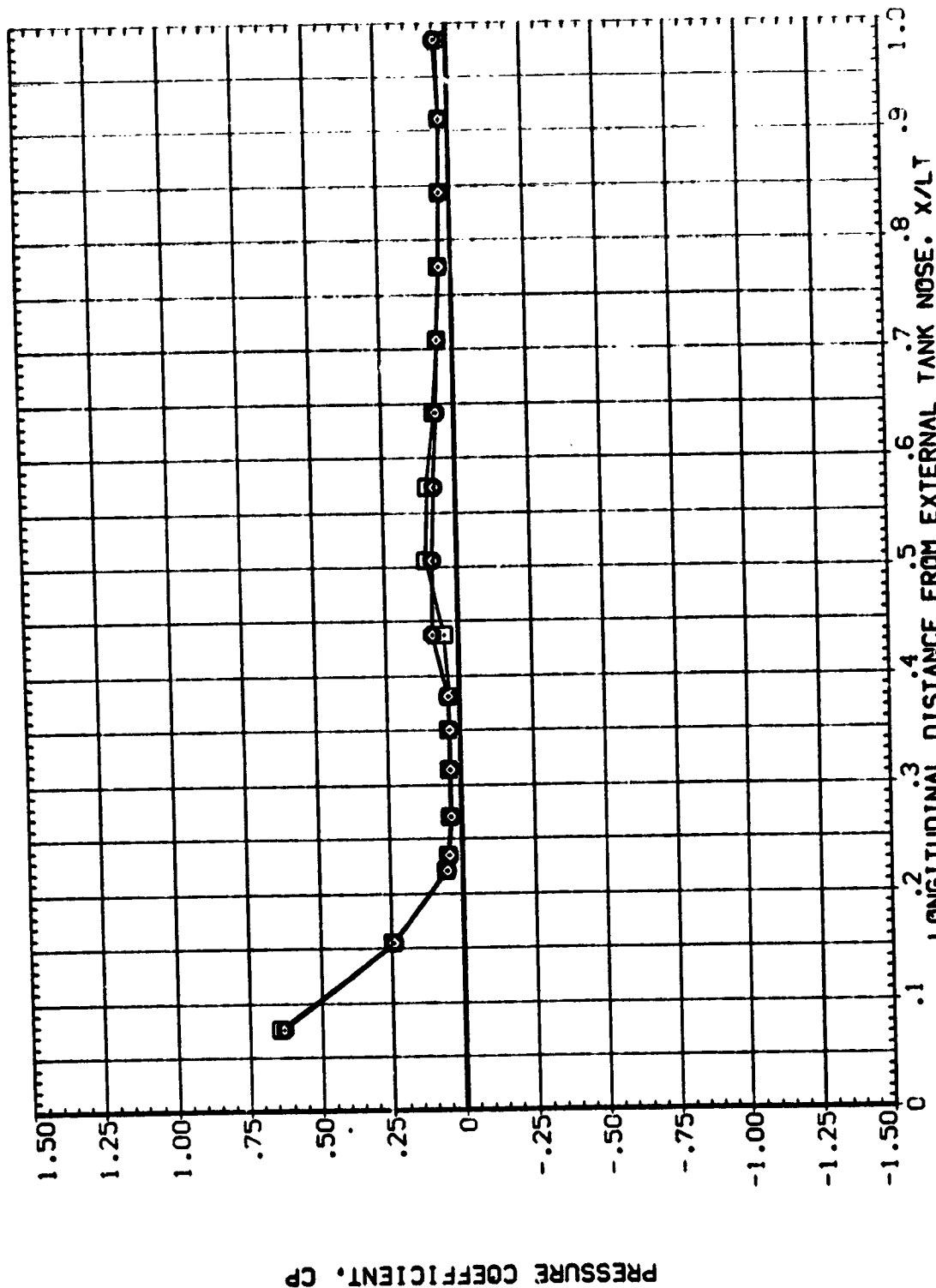
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000 CONFIG  
 .140 RUDDER  
 .000 DRG INC

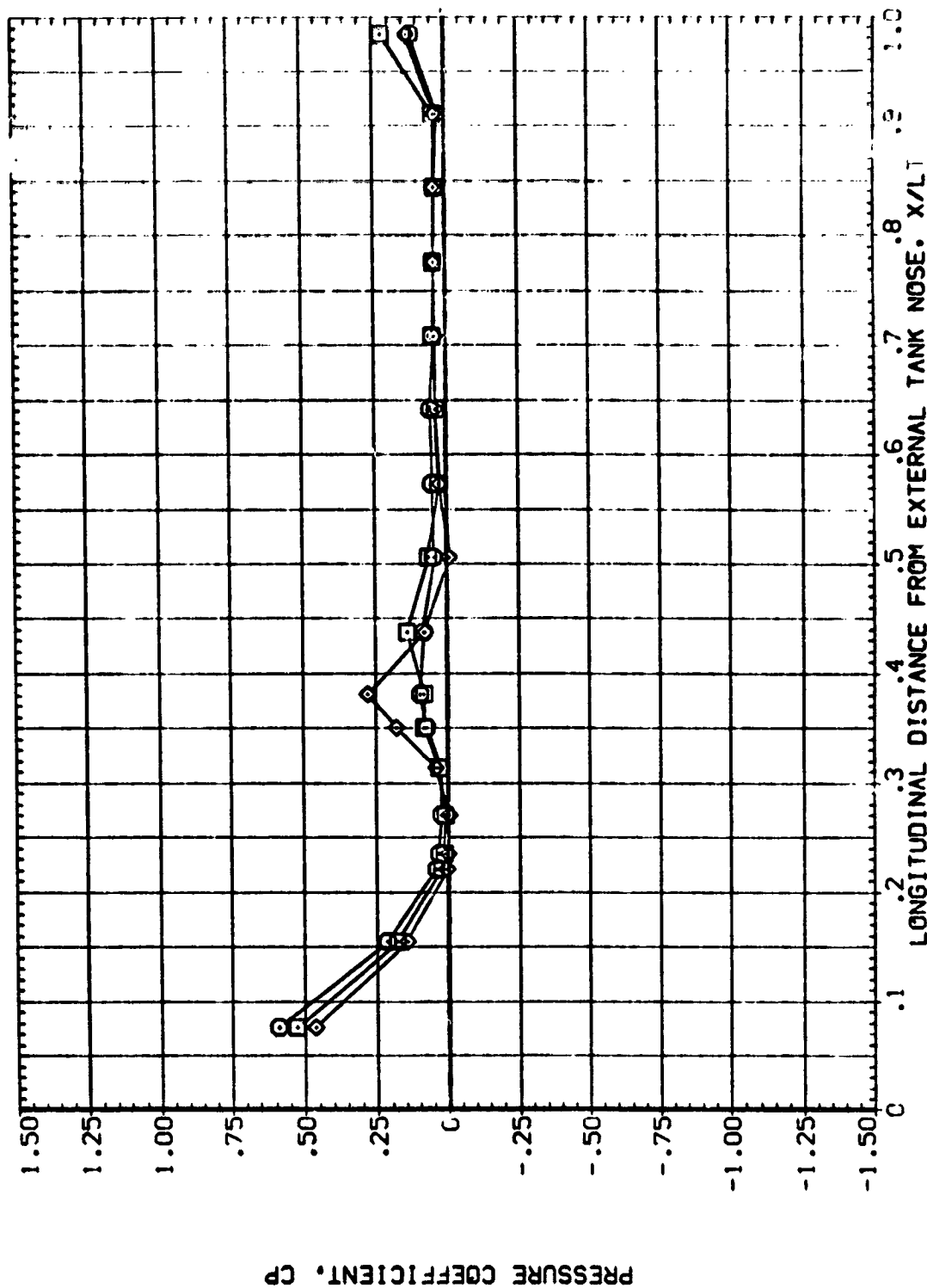
30.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

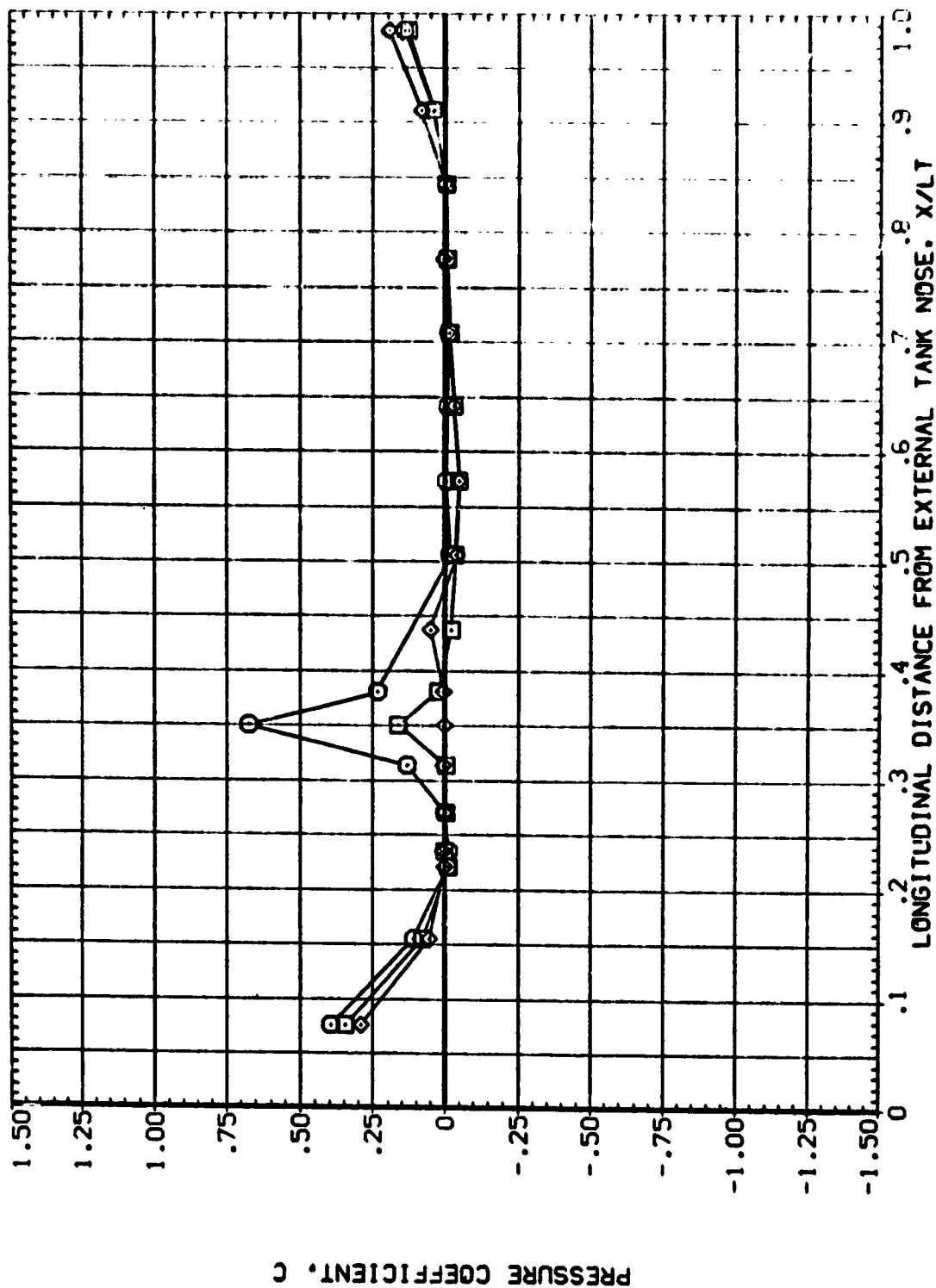
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SO. IN.	BETA	CONFIS	90.000
○	216.000	8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTAZ	.000	.000
□	234.000							IN.	X-SRB	.140	.000
◇	252.000							IN.		.000	.500
				ZPRP				IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	SREF	LREF
○	270.000	1.000	3.500	6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	288.000									.140	RLODER
◇	306.000									.000	ORBITAL

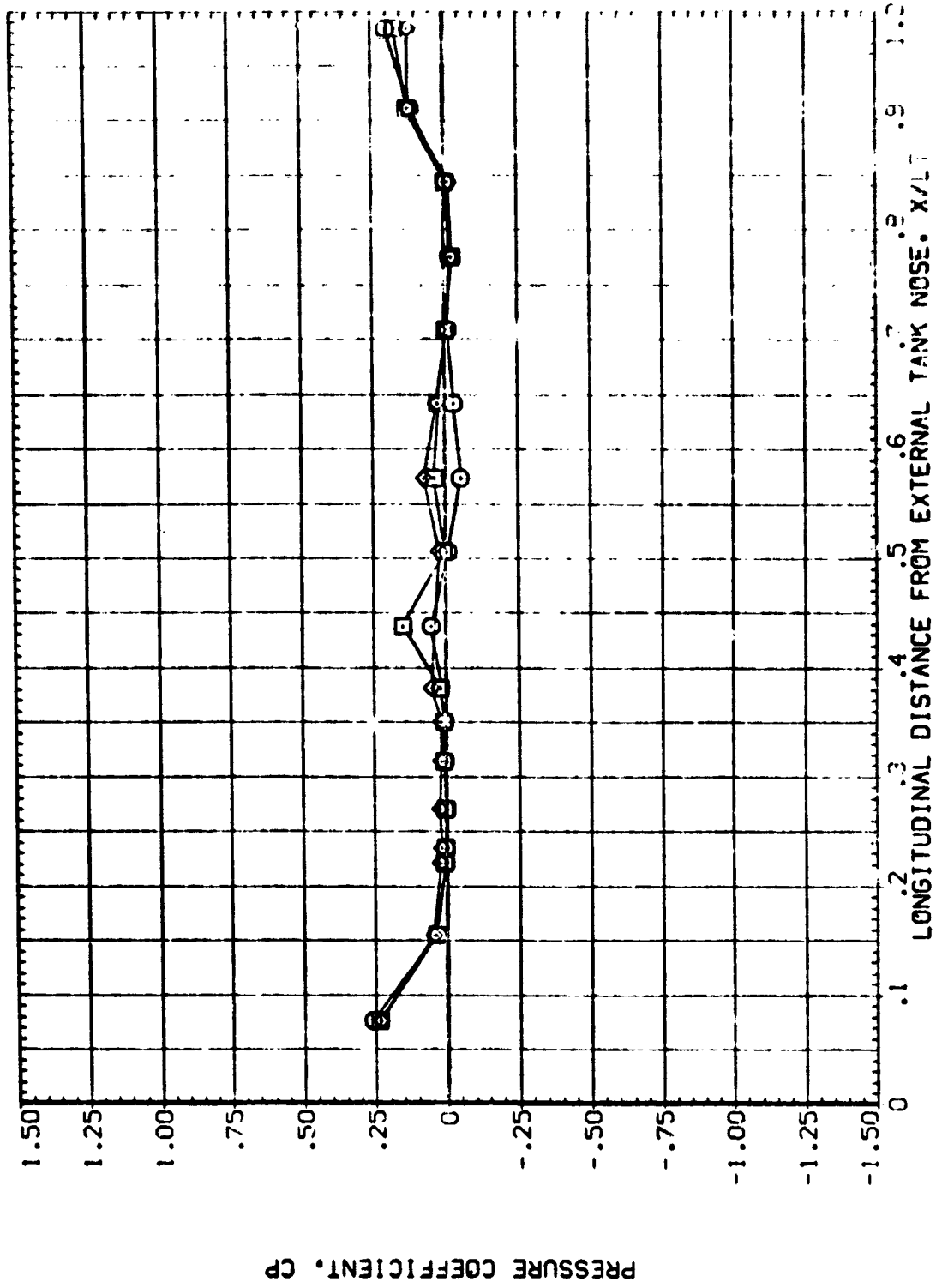


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

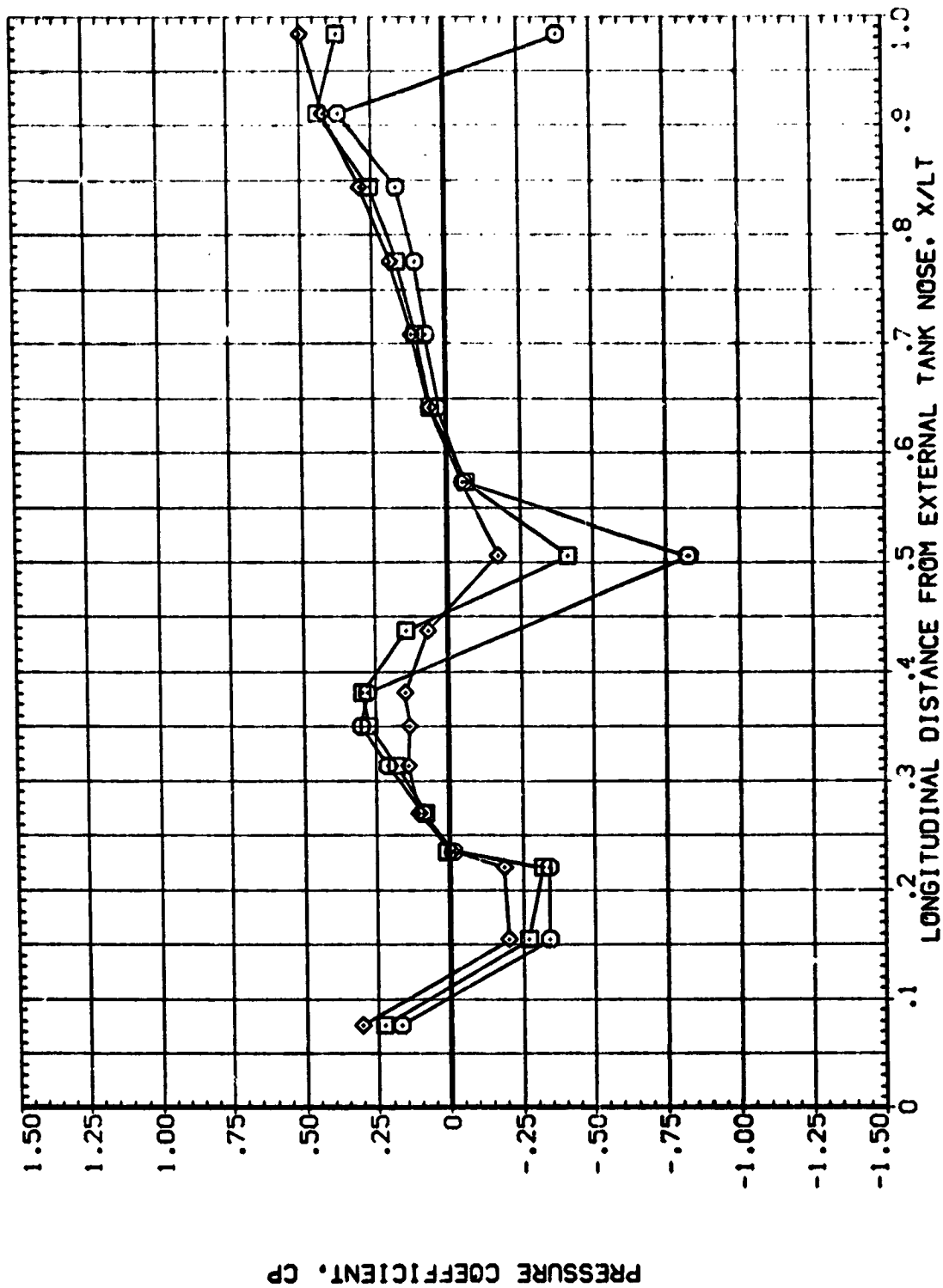
SYMBOL	PHI	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	VMRP	SO. IN.	BETA	CONFUS	50.000
○	324.000	8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	342.000							IN.	DELTA Z	.140	.000
◇	360.000							IN.	DELTA Z	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

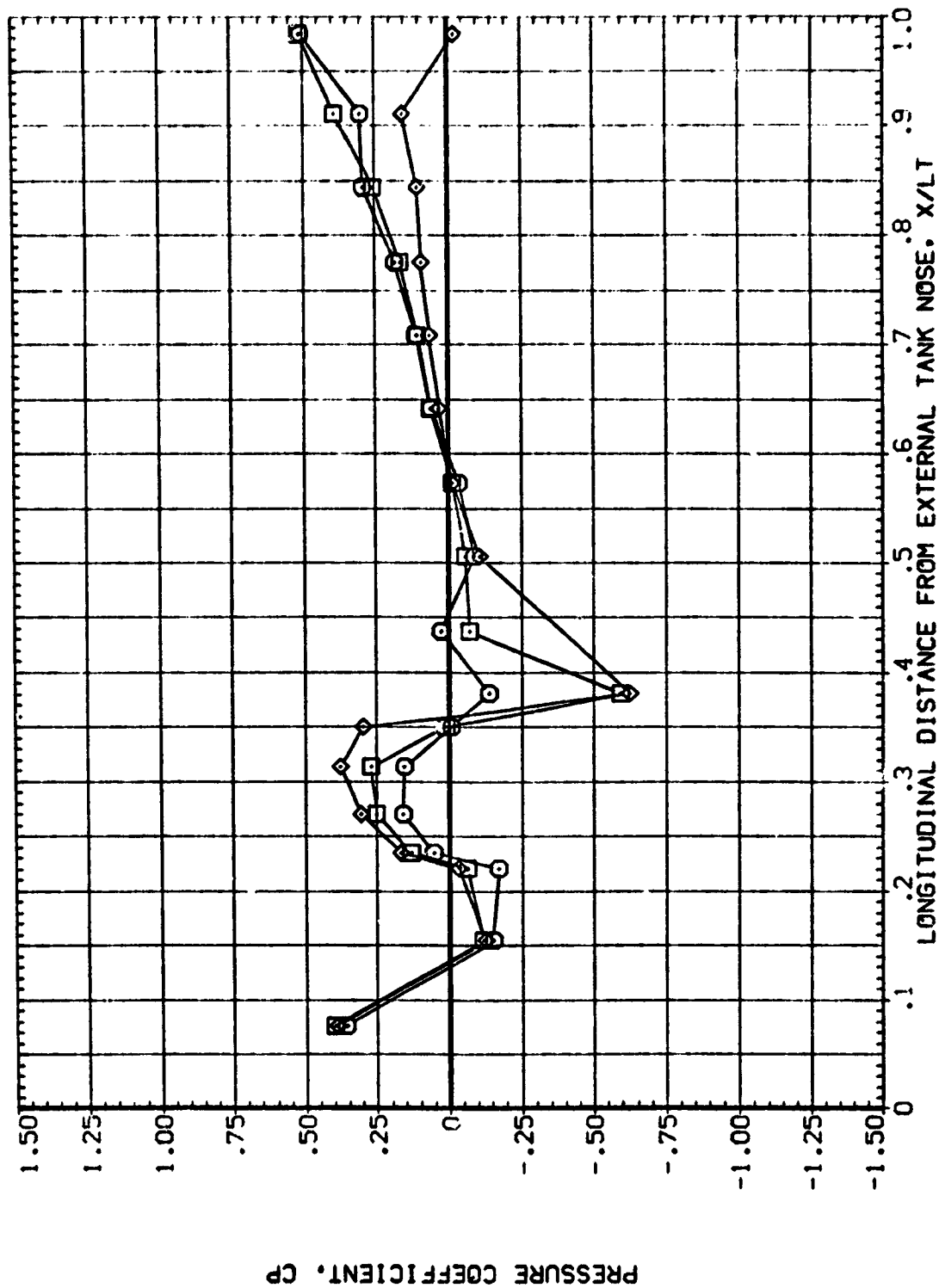
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	6.198	5.313	5.313	.000
◇	.000	-8.000	.900					50. IN.	ALPHA	.000	CONF IG
□	18.000							IN.	DELTA Z	.140	RUDDER
◇	36.000							IN.	X-SRB	.000	ORBIT INC
								IN.		.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

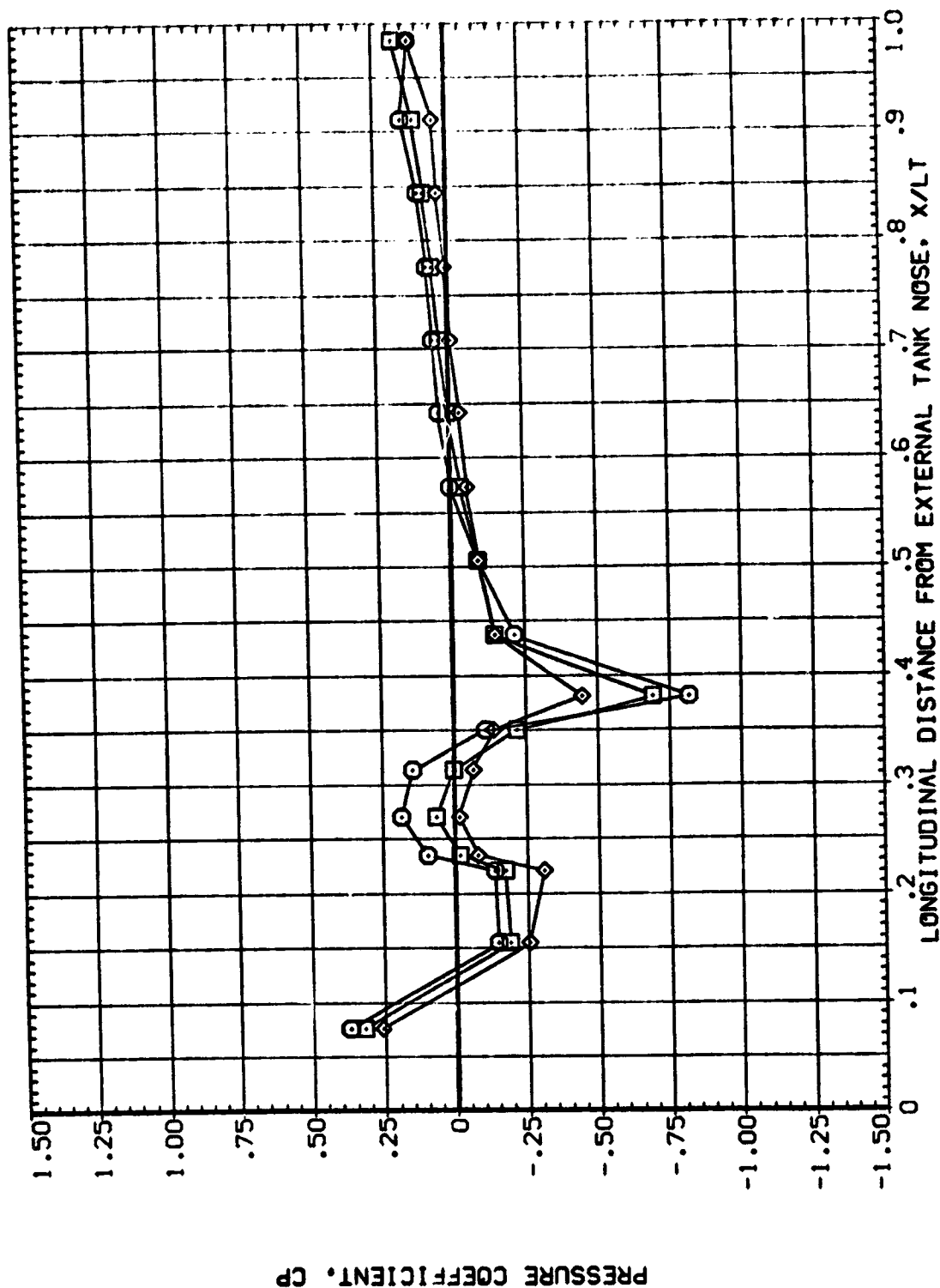
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	
□	54.000	-8.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	RUDER
◇	72.000							IN.	X-SRB	.000	ORBITING
	90.000							IN.		.000	
								IN.		.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

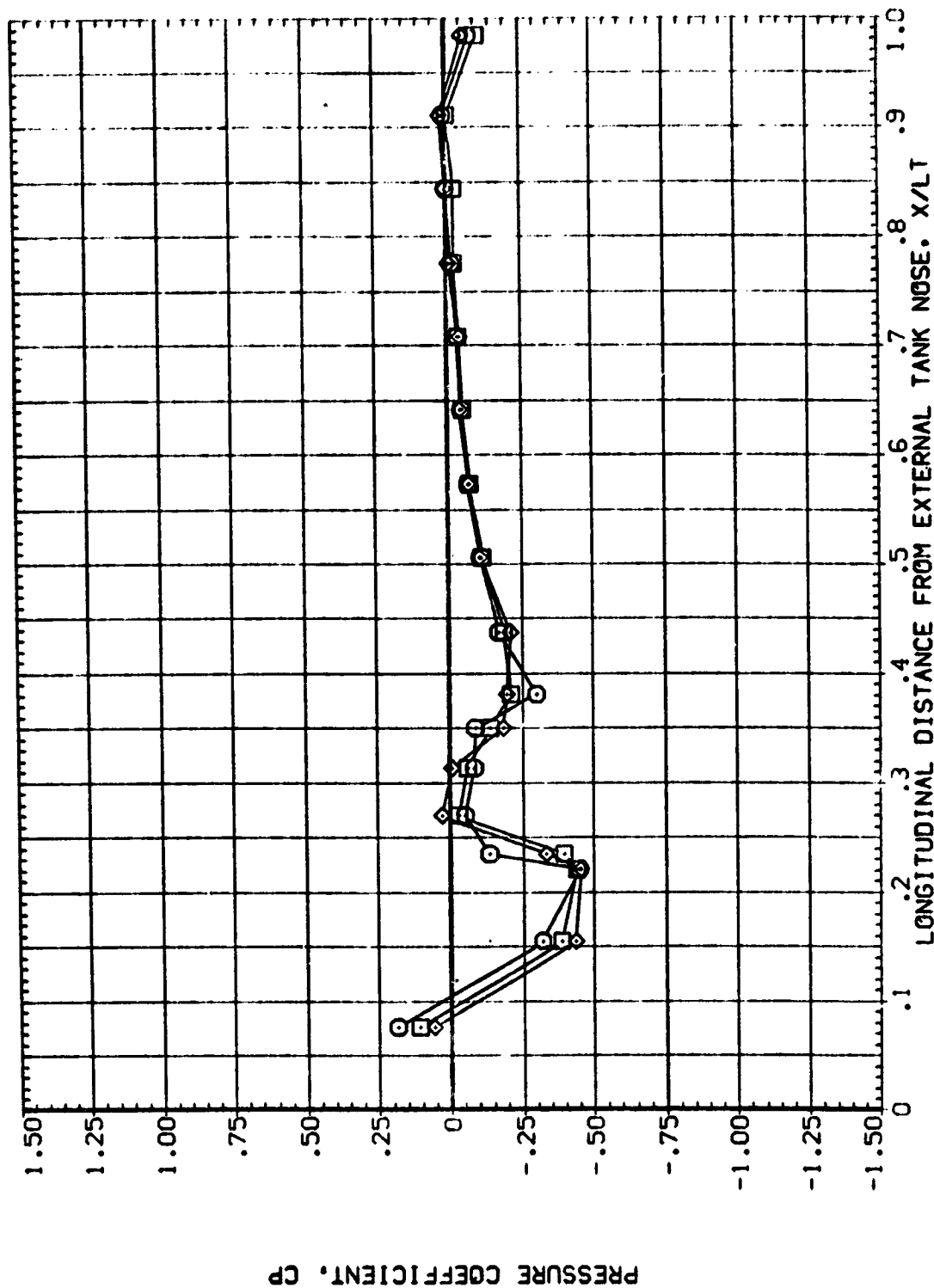
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LRFP	XRFP	ZRFP	ALPHA	DELTA Z	CONFIG	ORBITAL
○	108.000	-8.000	.900	6.198	5.313	2.549	.000	.000	.140	.000	.500
□	126.000										
◇	144.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

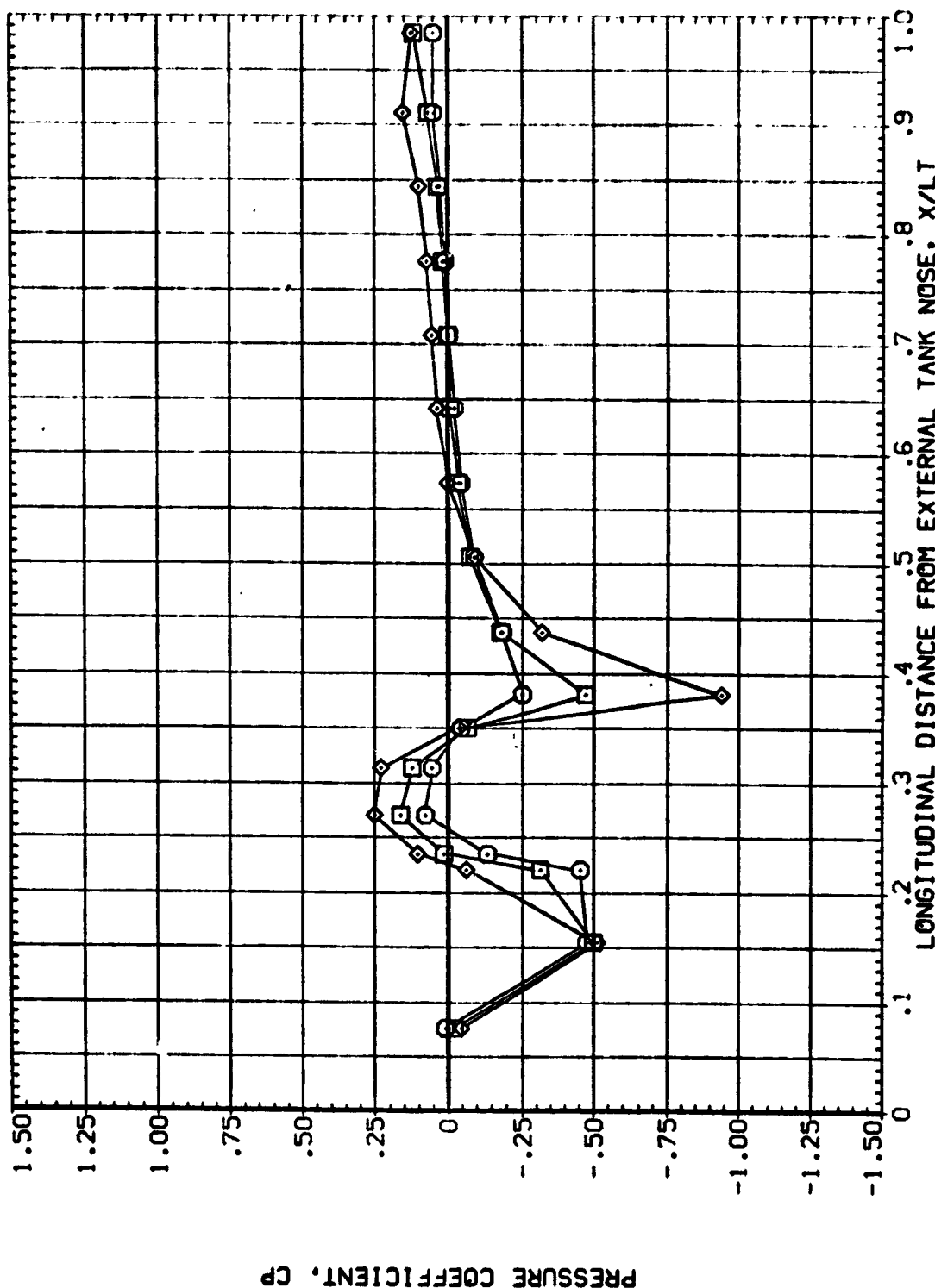
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	CONF IG
□	162.000	-8.000	.900	6.198	5.313	5.313	2.549	.000	.000	.140	RUDDER
◇	160.000									.000	DR81NC
◇	198.000									.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106)

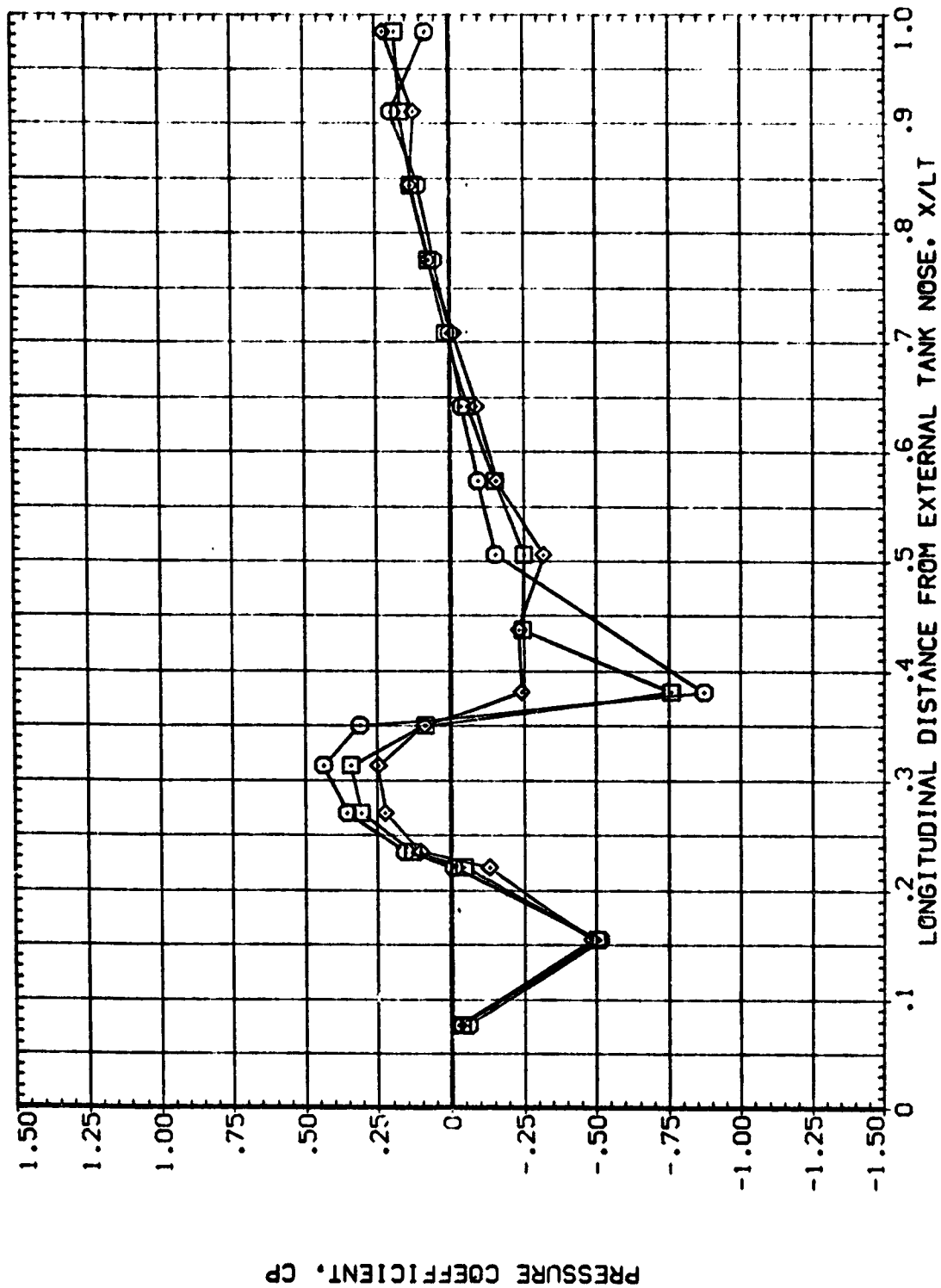
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	90.000
○	216.000	-8.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	234.000							IN.	X-SRB	.000	.000
◇	252.000							IN.		.000	.500
								IN.			
								IN.			
								IN.			
								IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

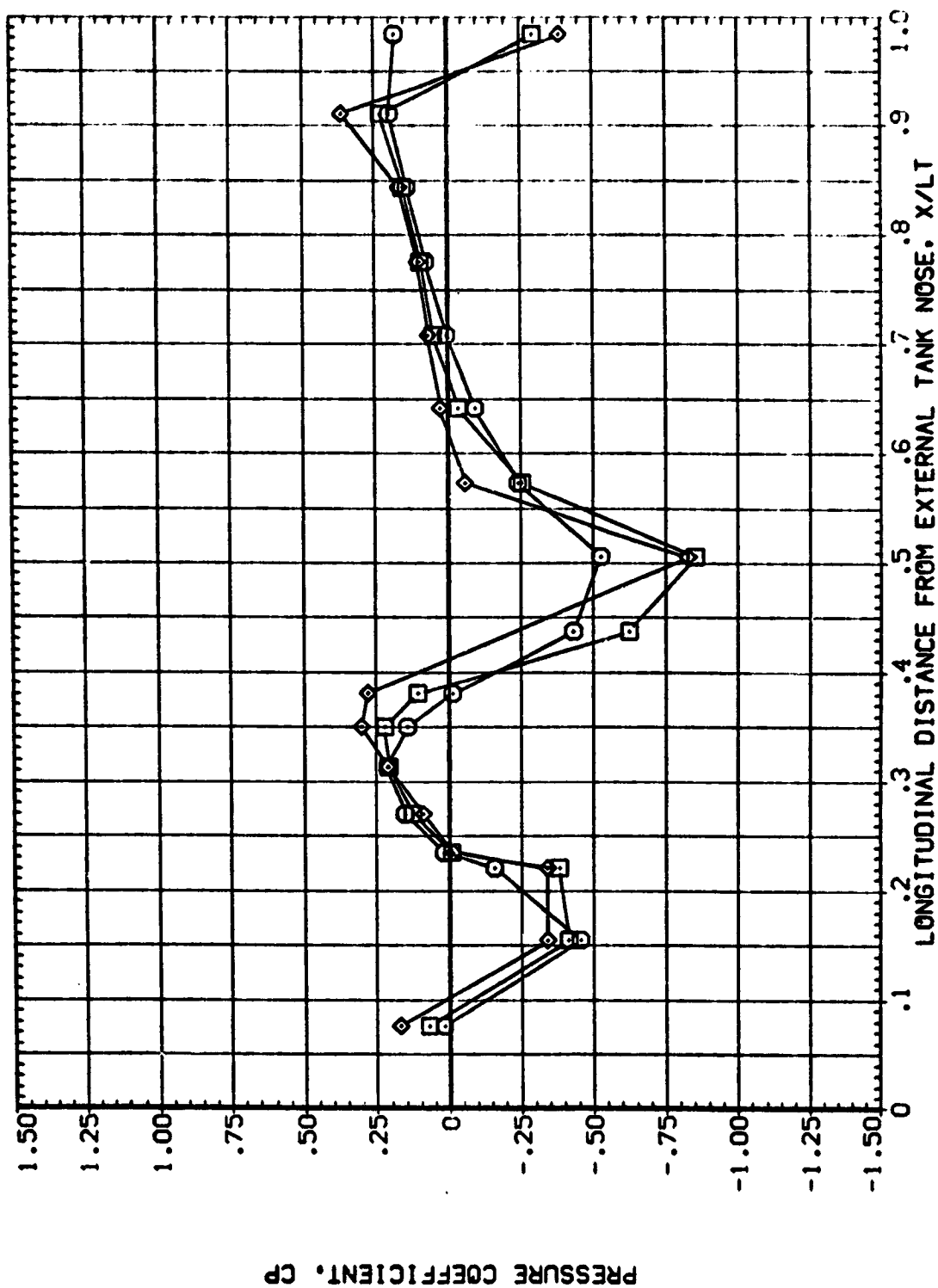
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	DELTA Z	CONFIG
○	270.000	-8.000	.900	6.198	5.313	5.313	2.549	IN.	.000	.140	RUDDER
□	288.000							IN.	.000	.000	DRS INC
◇	306.000							IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SO. IN.	ALPHA	CONF IG	
□	324.000	-8.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	90.000
◇	342.000							IN.	X-SRB	.140	.000
	360.000							IN.		.000	.500
								IN.			
								IN.			
								IN.			
								IN.			
								IN.			
								IN.			

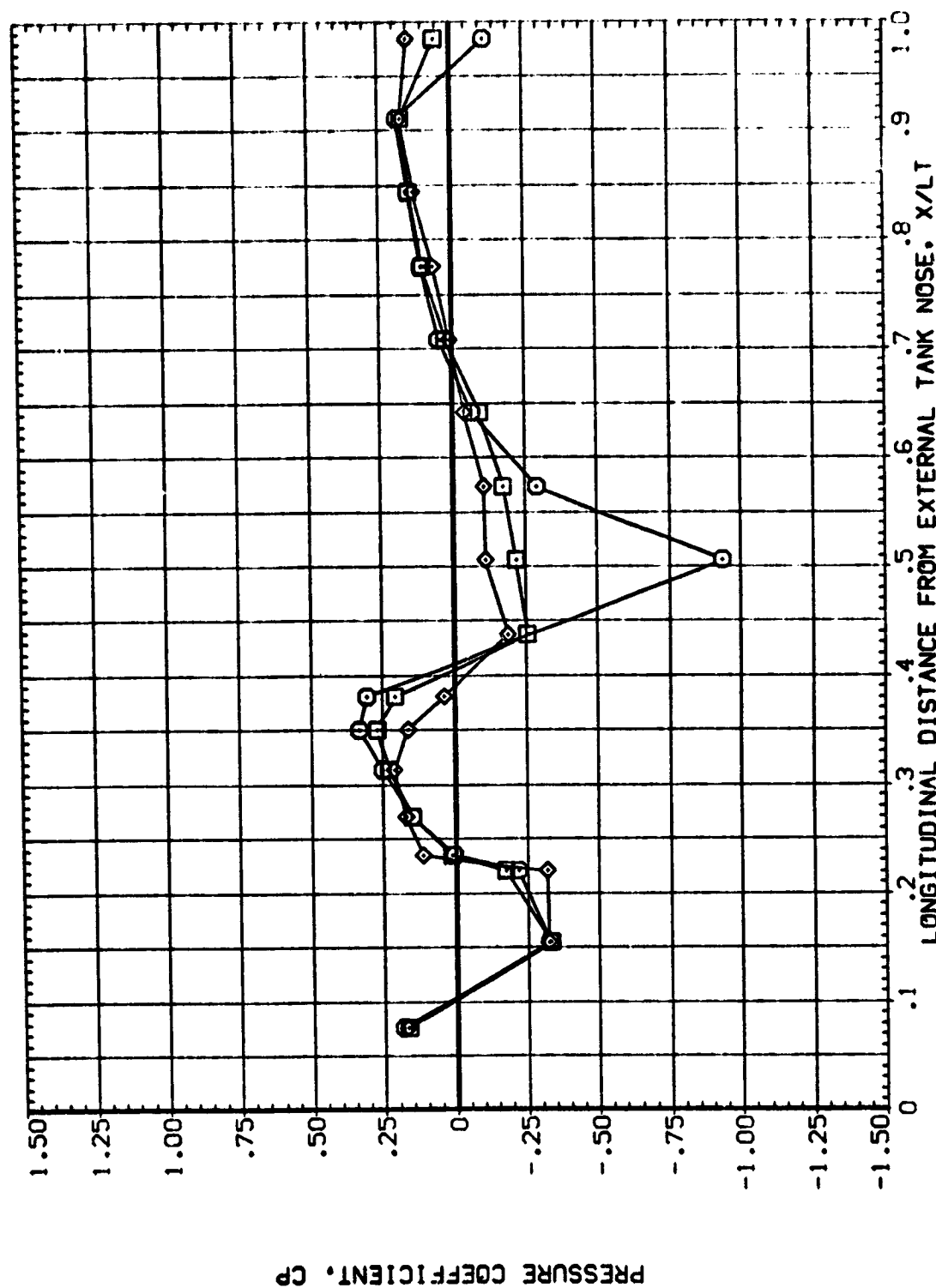


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

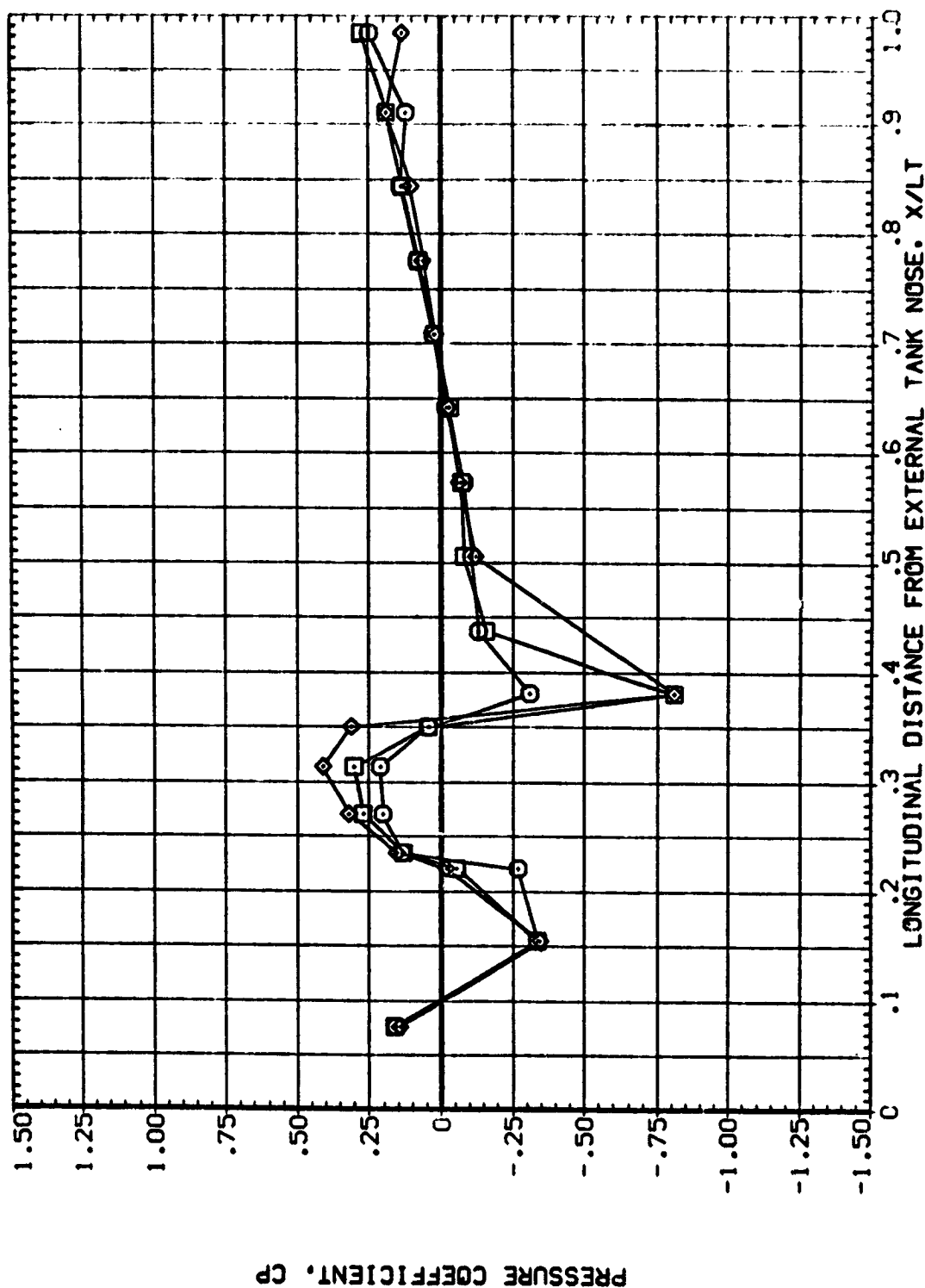
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. 1/4	ALPHA	CONF IG	90.000
□	18.000	.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	36.000	.000	.900	6.198	5.313	5.313	2.549	IN.	X-SRB	.140	.000
				YMRP	ZMRP			IN.	ORBITAL	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106)

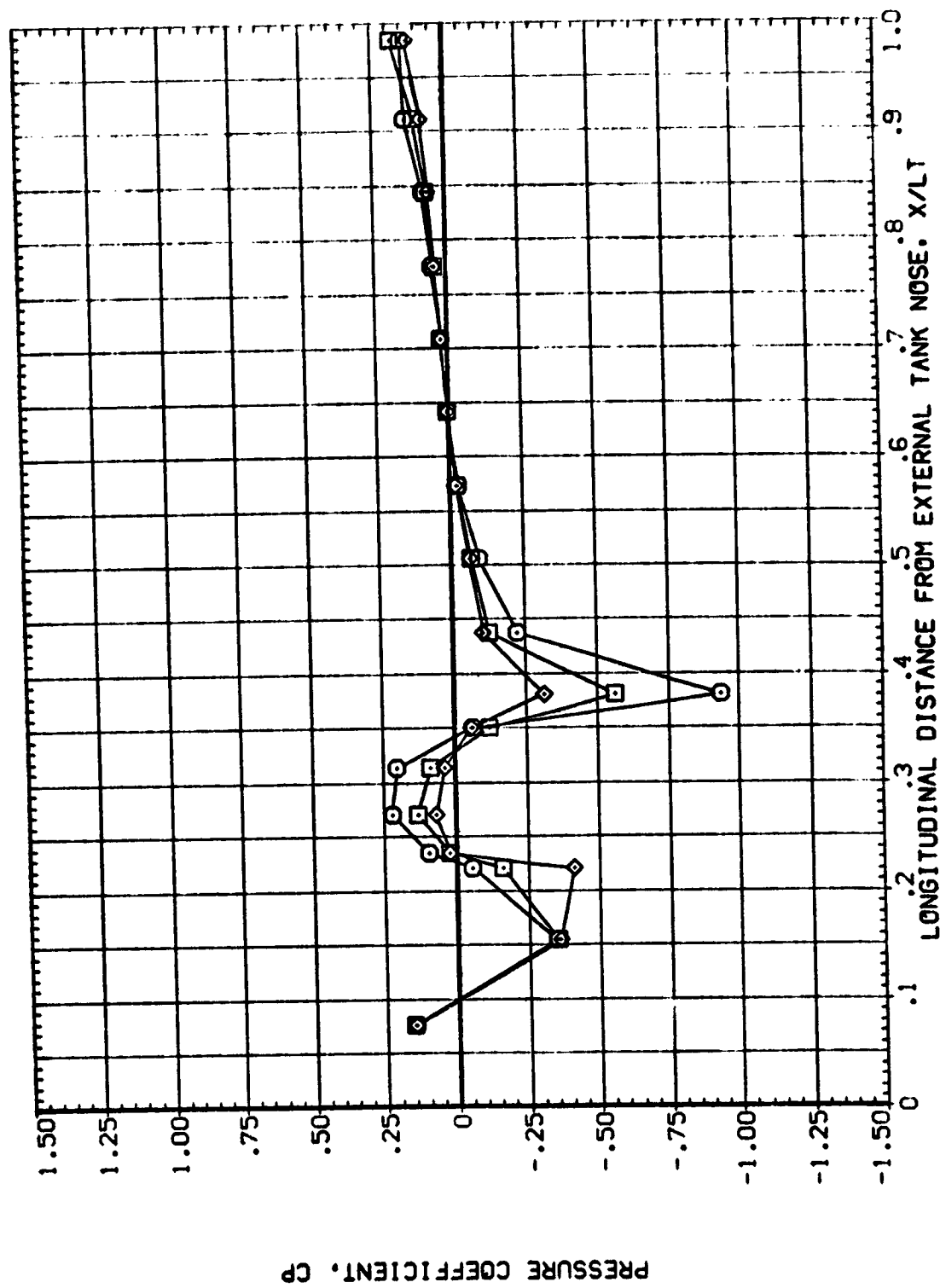
SYMBOL	PHI		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	54.000	72.000			SREF	LREF	BREF	XMRP	SO. IN.	IN.	ALPHA	DELTAZ
◇	54.000	72.000	.000	.900	6.198	5.313	5.313	2.549	6.198	5.313	.000	.140
□	72.000	72.000	.000	.900	5.313	5.313	5.313	2.549	5.313	5.313	.000	.140
◇	90.000	90.000	.000	.900	2.549	2.549	2.549	2.549	2.549	2.549	.000	.140



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

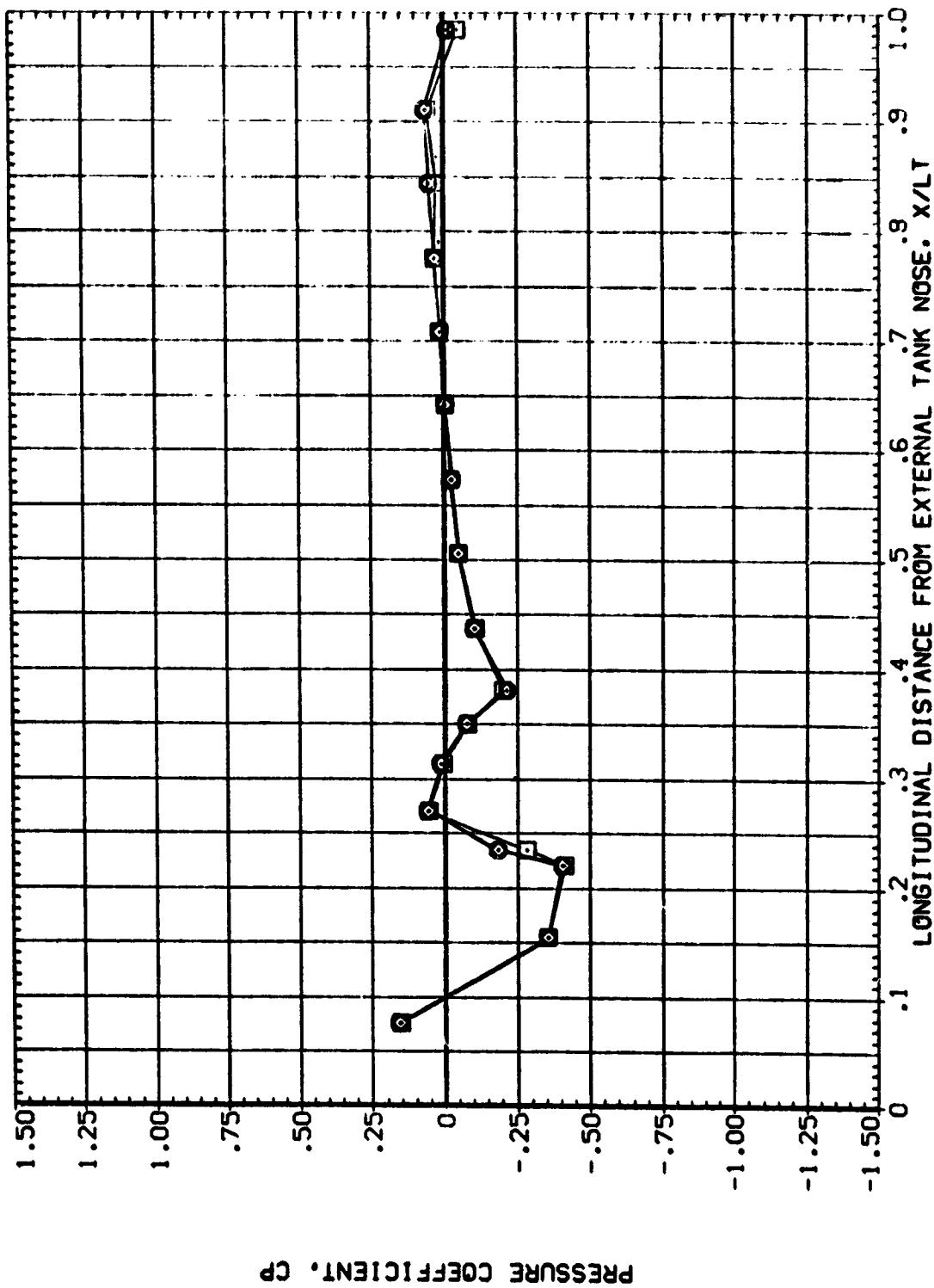
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	CONFIS	RUDDER
○	108.000	.000	.900	6.198	5.313	5.313	2.549	IN.	.000	.140	.000
□	126.000			2.000				IN.	X-SRB	.000	.500
◇	144.000			.000				IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

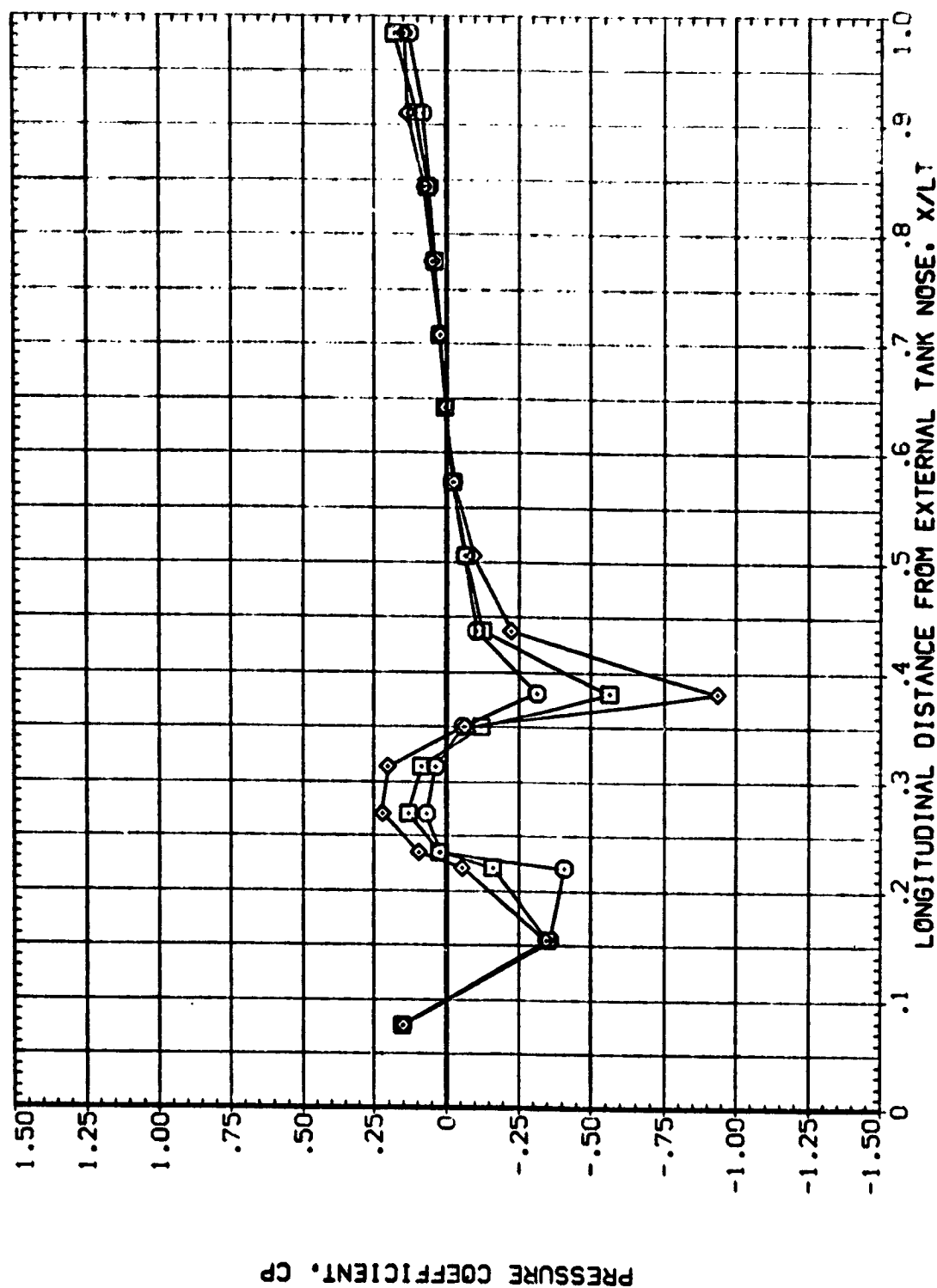
MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	CONF IG	
□	162.000	.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	90.000
◇	180.000							IN.	X-SRB	.140	.000
◇	198.000							IN.		.000	.500
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

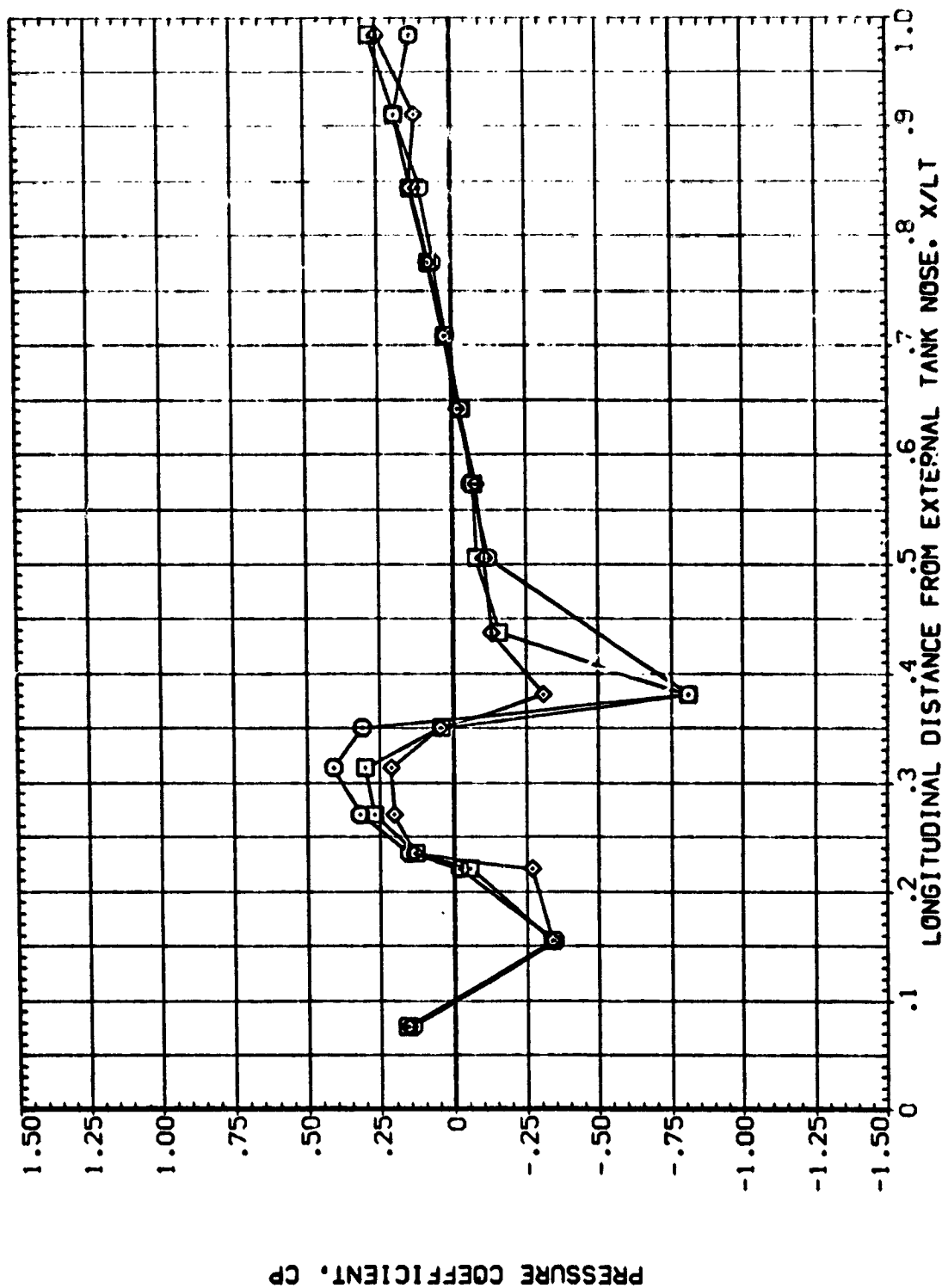
SYMBOL	PMI	BETA	MACH	REFERENCE DATA		SO. IN.		ALPHA		PARAMETRIC VALUES	
○	216.000	.000	.900	SREF	5.198	IN.	CONFS	.000	.000		
□	234.000			LREF	5.313	IN.	RIDER	.140	.000		
◇	232.000			BREF	5.313	IN.	ORBITC	.000	.500		
				XPRP	2.549	IN.					
				YPRP	.000	IN.					
				ZPRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82106)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	SD. IN.	IN.	IN.	IN.
○	270.000	.000	.900	6.198	5.313	5.313	2.549	50.000	.000	.000	.000
□	288.000	.000	.900	6.198	5.313	5.313	2.549	50.000	.000	.000	.000
◇	306.000	.000	.900	6.198	5.313	5.313	2.549	50.000	.000	.000	.000

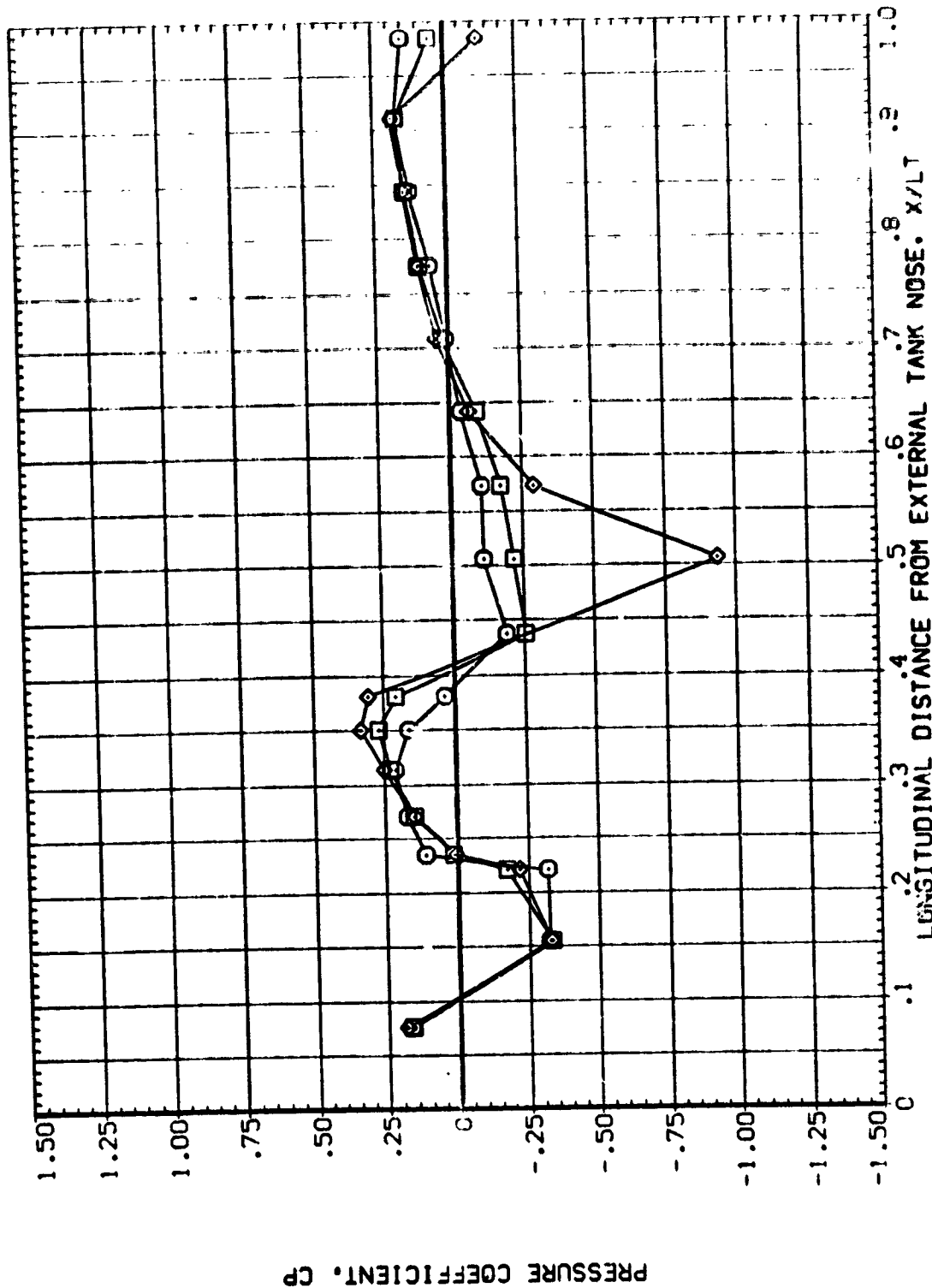


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82T06)

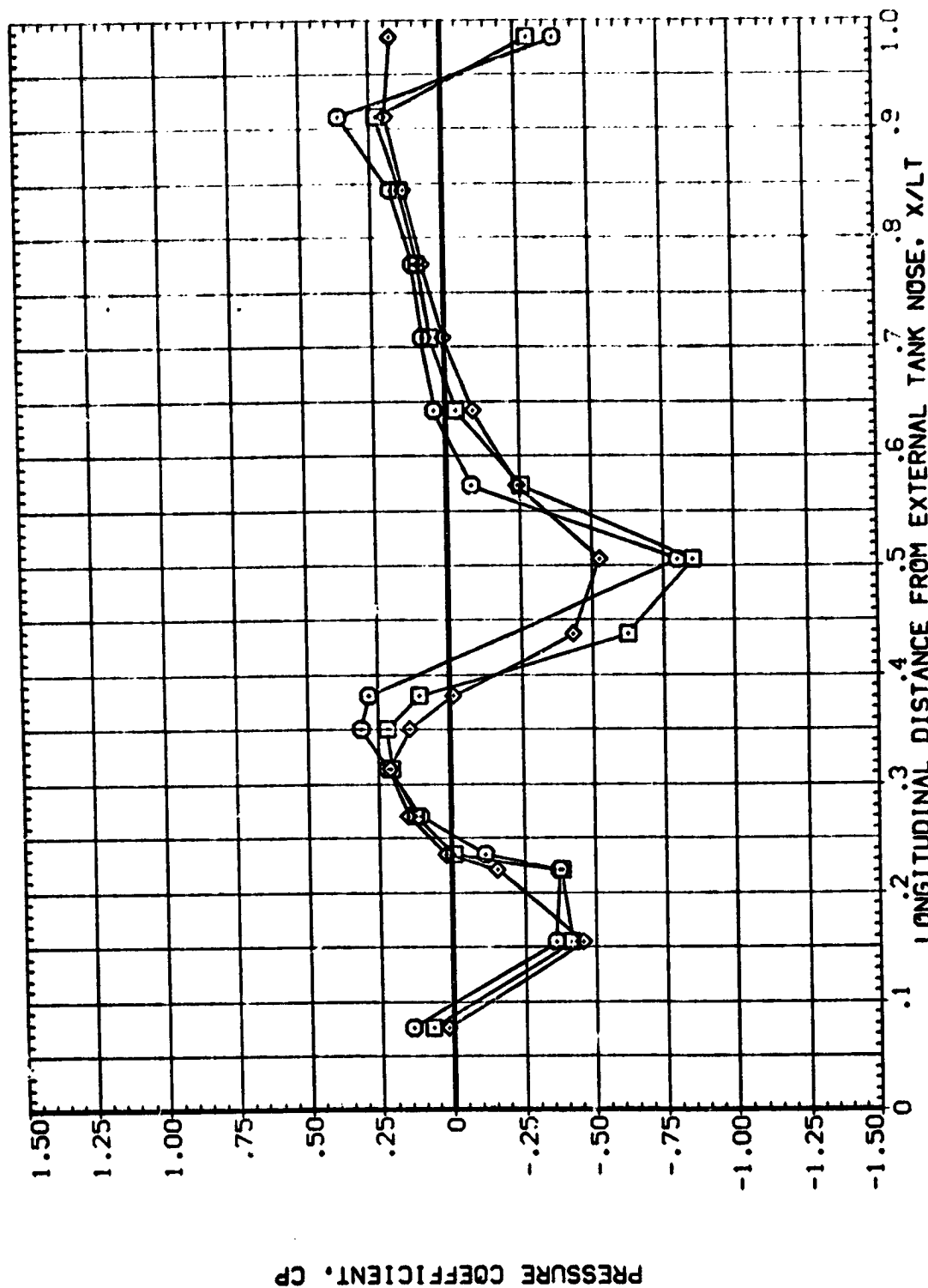
SYMBOL	PHI		BETA	MACH	REFERENCE DATA					PARAMETRIC VALUES		
	324.000	342.000			SREF	LREF	BREF	50. IN.	ALPHA	CONFIS	RUDER	DRBINC
□	360.000		.000	.900	6.198	5.313	5.313	IN.	DELTA Z	.140	.000	
◇					2.549			IN.	X-SRB	.000	.500	
					.000			IN.				
					ZMRP			IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF 15	90.000
□	.000	8.000	.900	5.313	5.313	5.313	2.545	IN.	DELTA Z	.140	.000
◇	18.000			.000	.000	.000	.000	IN.	X-SRB	.000	.500
	26.000							IN.			

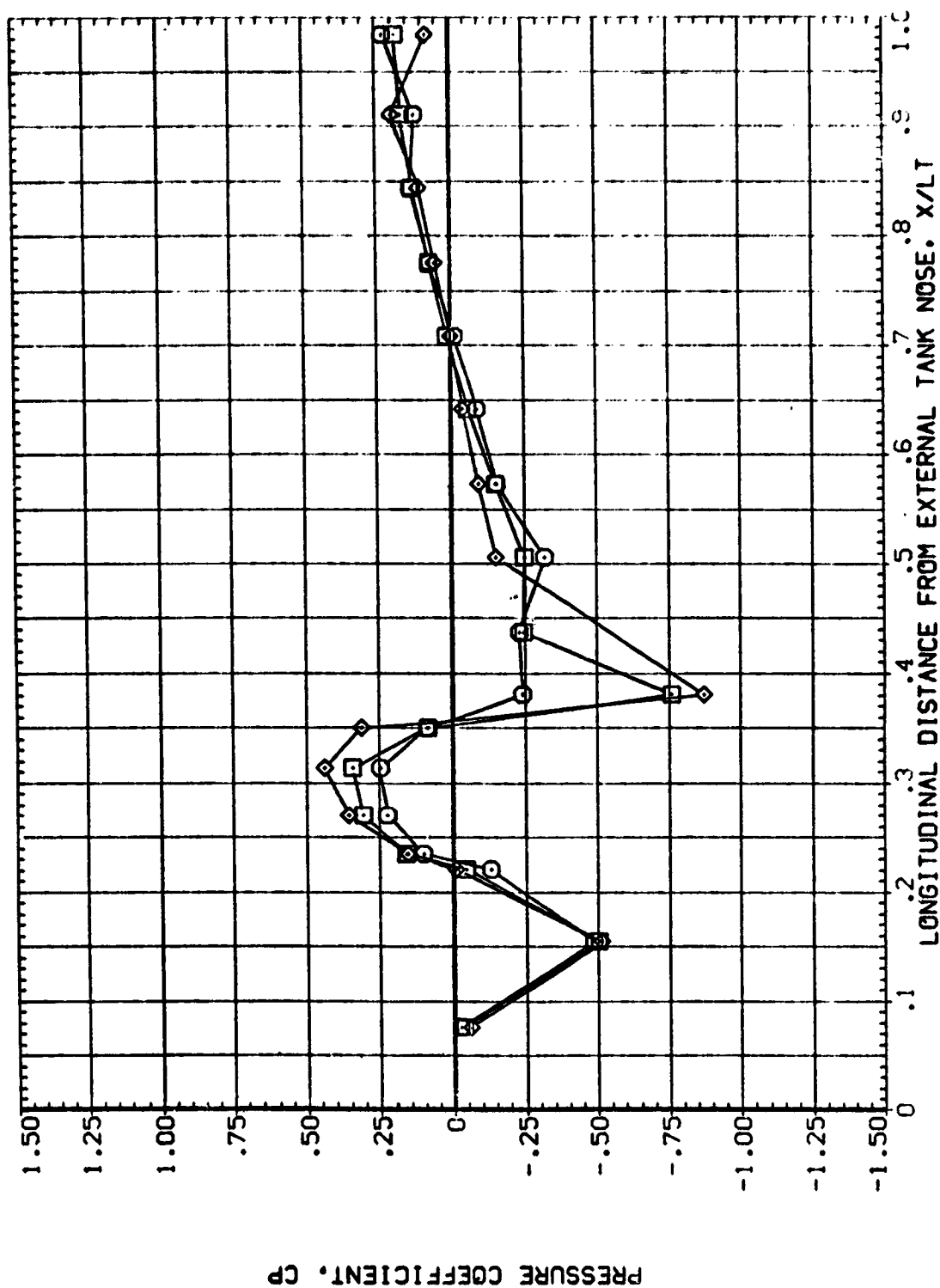


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

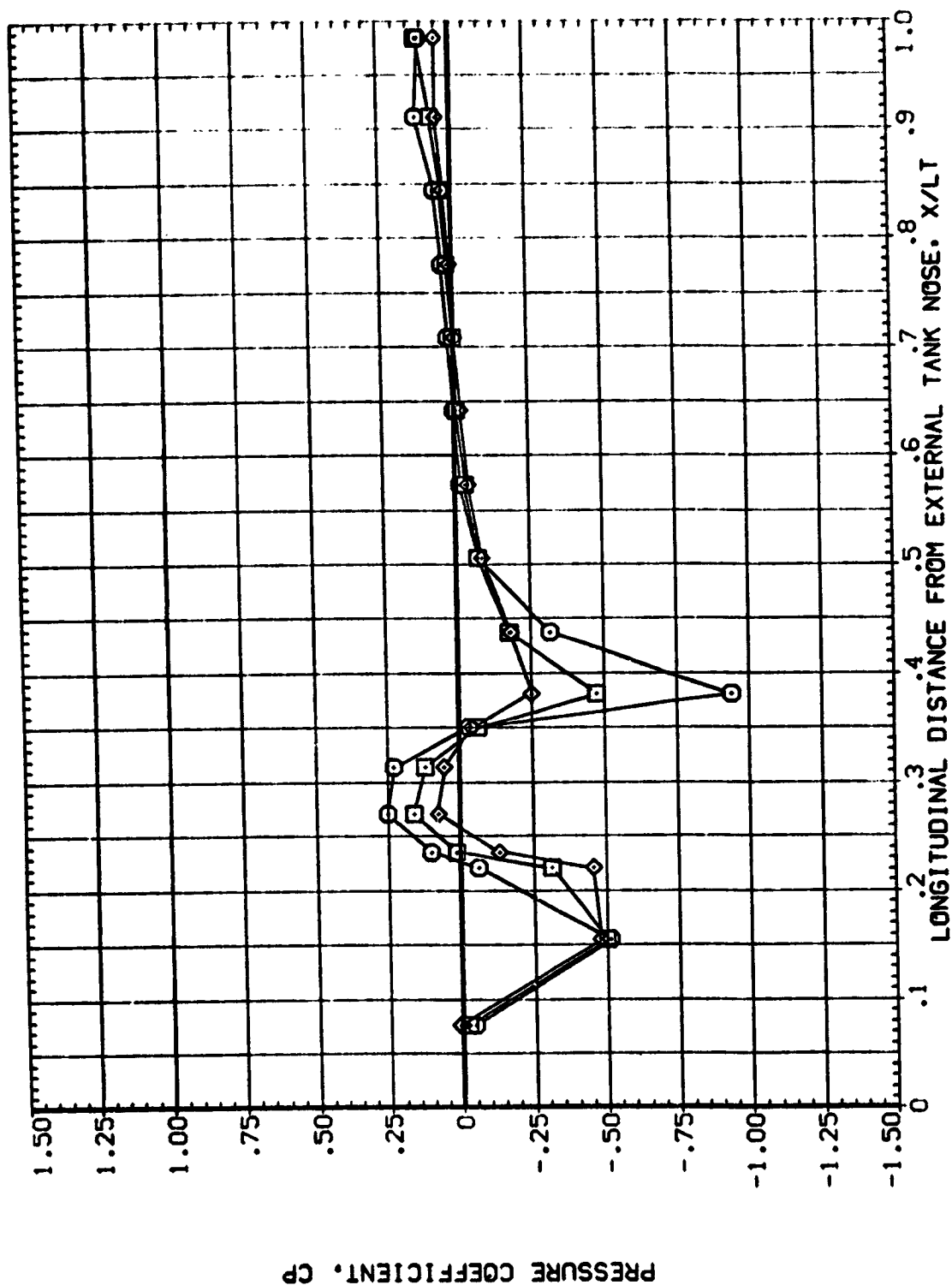
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SD, IN.	ALPHA DELTA Z X-SRB	CONF IG	RUDDER
□	54.000	8.000	.900	6.198	5.313	5.313	2.549	IN.	.000	.000	.000
◇	72.000							IN.	.140	.000	.000
◇	90.000							IN.	.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

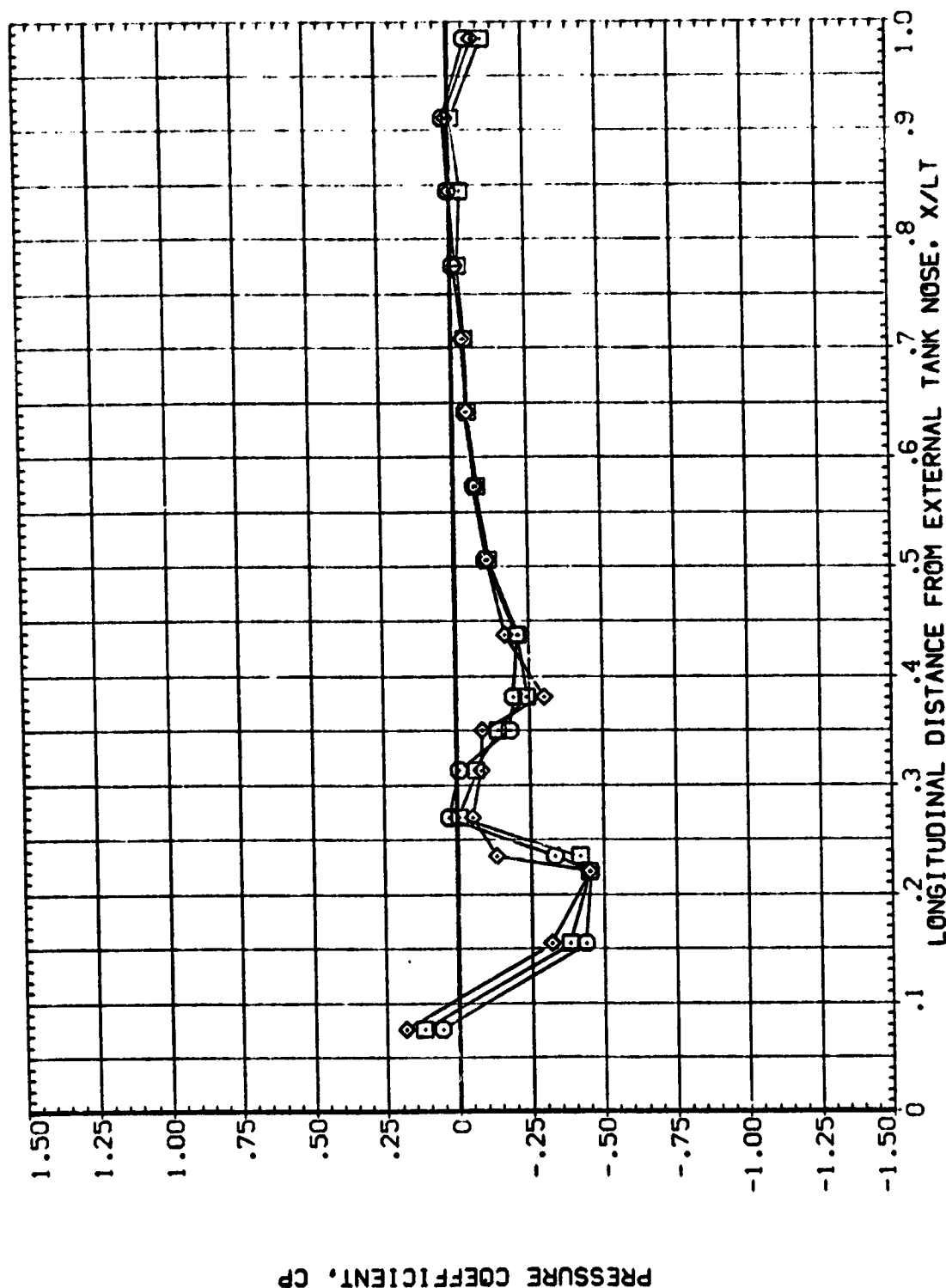
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SO, IN.	ALPHA	CONFIG	90,000
□	108,000	8.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	126,000							IN.	X-SRB	.140	.000
	144,000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

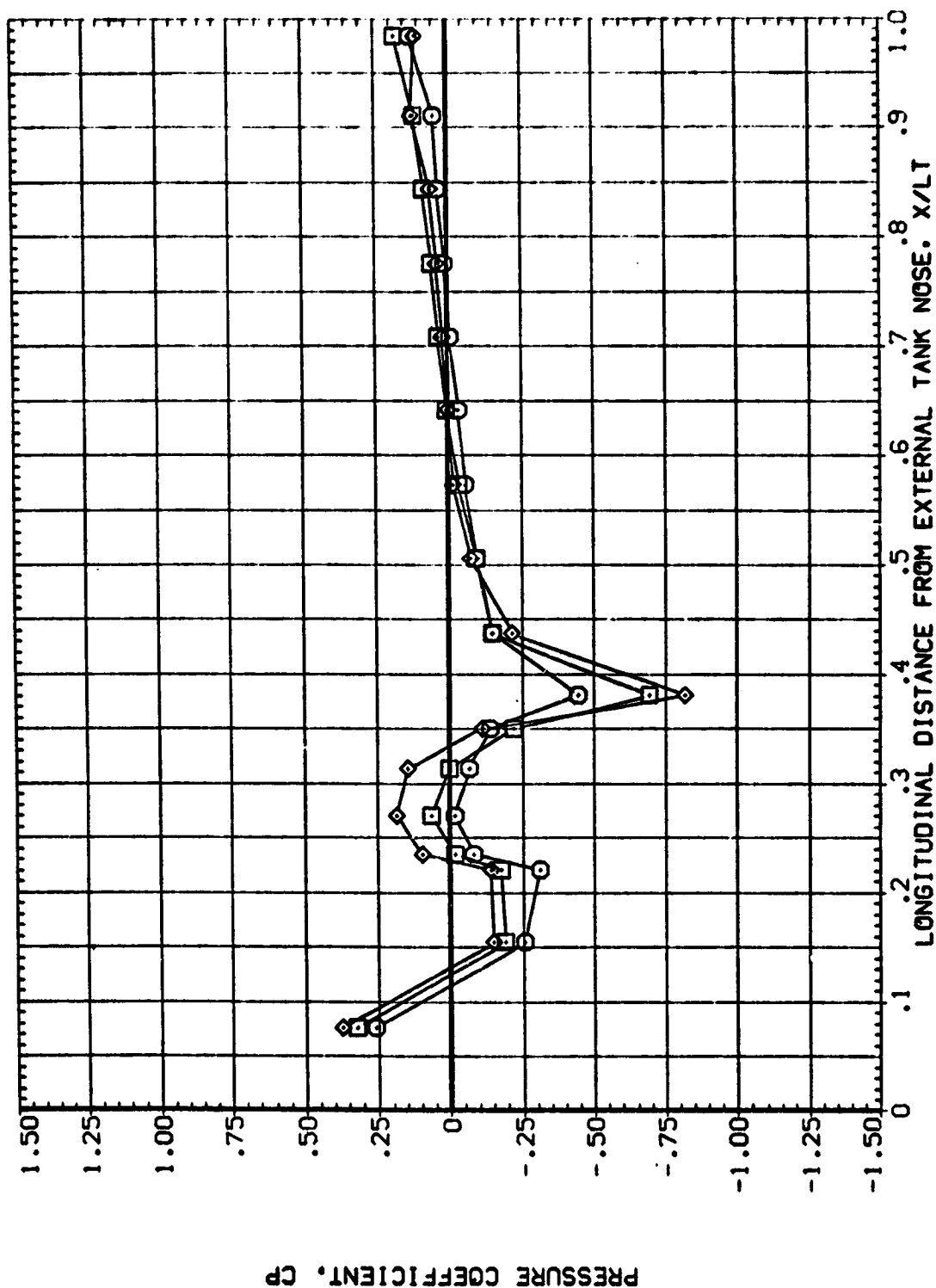
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SD. IN.	ALPHA	CONF IG	90.000
□	162.000	8.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	198.000							IN.	X-SRB	.000	.500
								IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

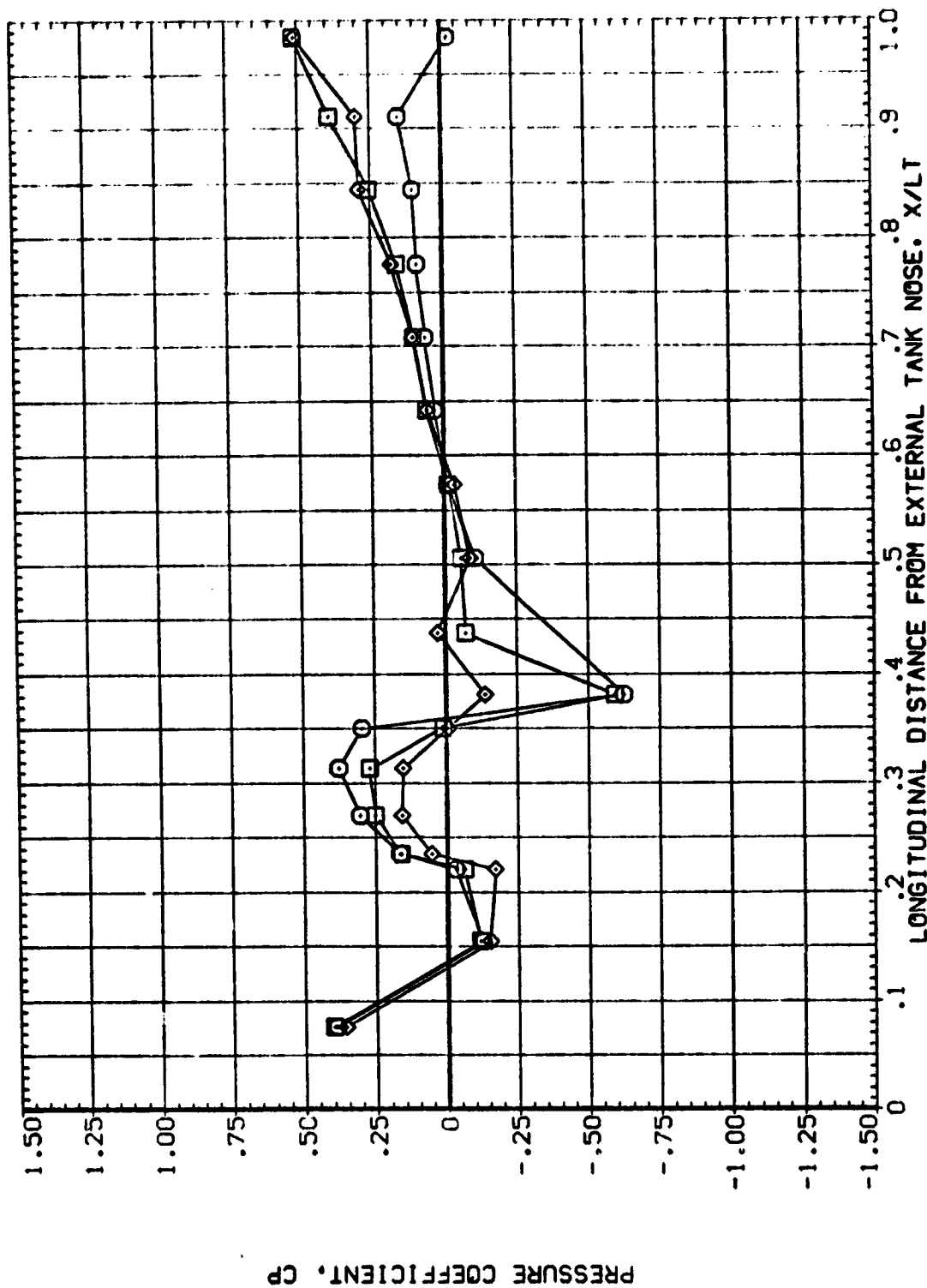
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	50. IN.	ALPHA	CONF IG	90.000
○	216.000	8.000	.900	5.313	5.313	5.313	2.549	IN.	DELTA Z	.140	.000
□	234.000							IN.	X-SRB	.000	.000
◇	252.000							IN.			.500
								IN.			
								IN.			
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	SO. IN.	ALPHA	CONF:G	CONF:G	
○	270.000	8.000	.900	LREF	5.313	DELTAZ	.000	R/CORR	.000
□	288.000			BREF	5.313	1-SRB	.140		.000
◇	306.000			XMRP	2.548		.000	ORBITAL	.500
				ZMRP	.000				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL  
 ○  
 □  
 ◇

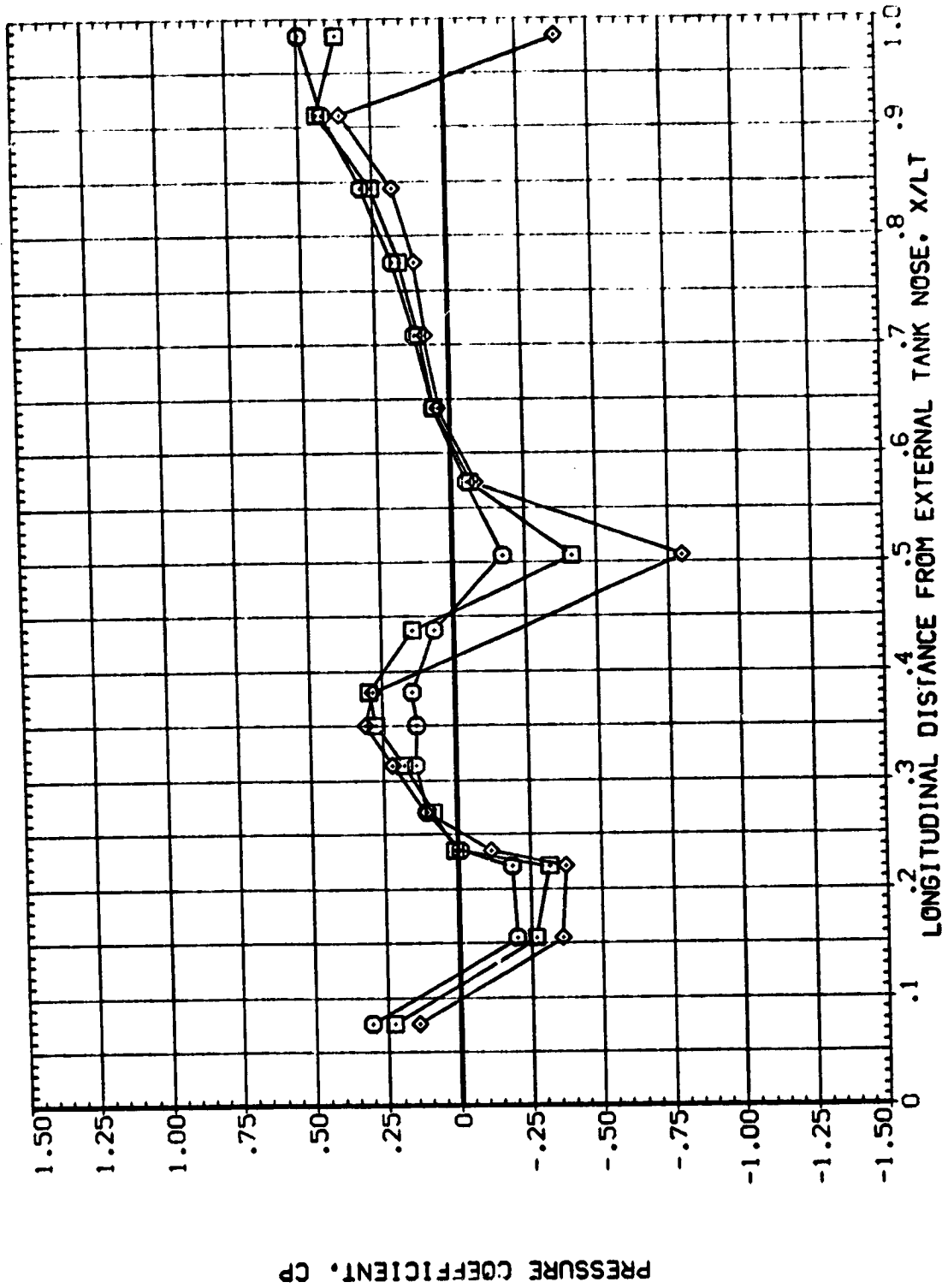
PHI  
 324.000  
 342.000  
 360.000

BETA  
 8.000  
 MACH  
 .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000 CONF IG  
 .140 RUDDER  
 .000 CRB INC  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

**SYMBOL**   

PHI  
18.000  
36.000

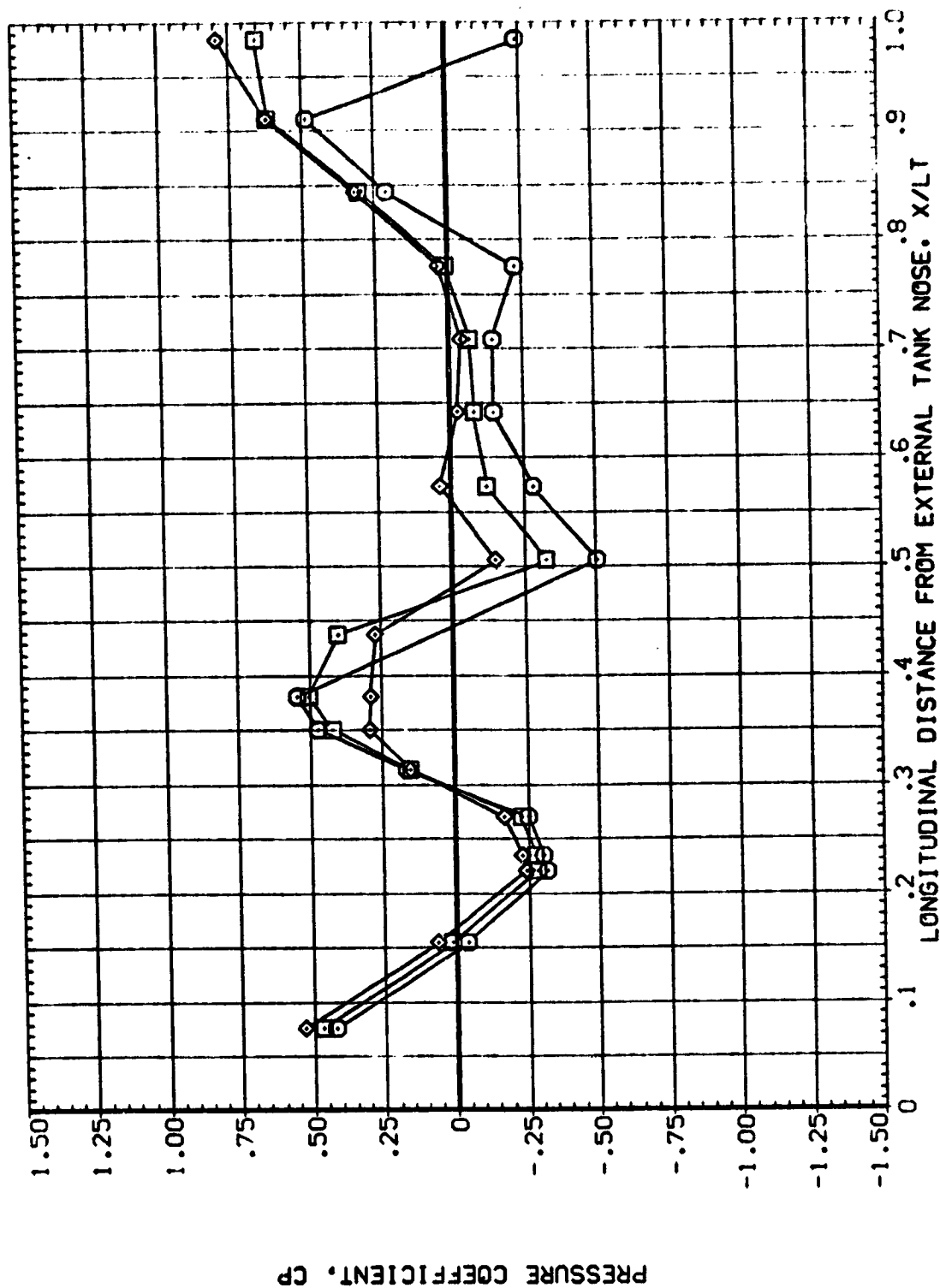
BETA	MACH
-8.000	1.250

REFERENCE DATA		50 IN.
SREF	6.198	IN.
LREF	5.313	IN.
BREF	5.313	IN.
XMPP	2.549	IN.
YPJP	.000	IN.
ZMPP	.000	IN.

### PARAMETRIC VALUES

ALPHA  
DELTA Z  
X-SRB

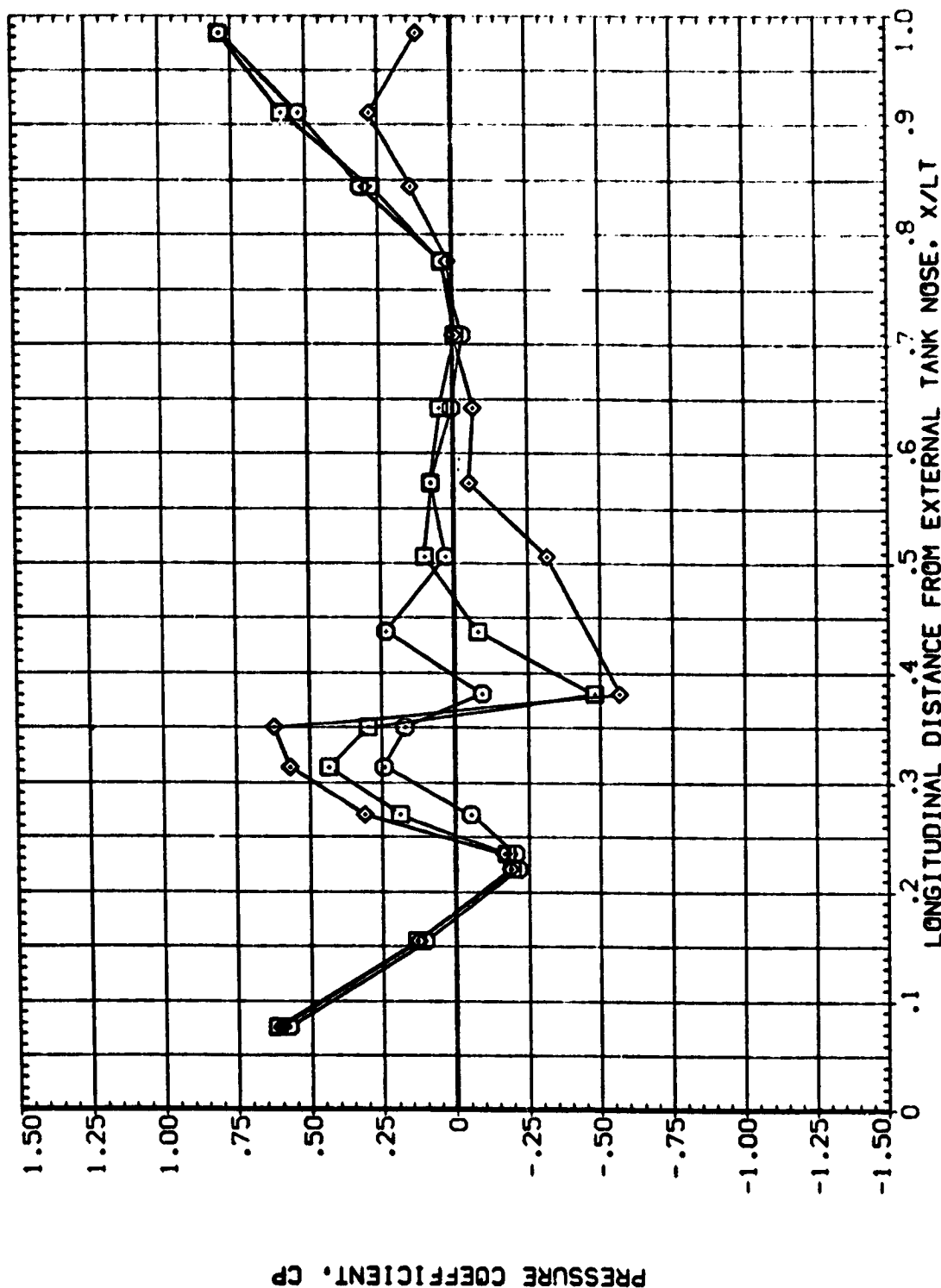
.000	CONFIS	90.000
.140	RODER	.000
.000	ORRINE	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	54.000	72.000	8.000	1.250	6.198	5.313	5.313	2.549	2.549	2.549	SO. IN.	IN.	IN.	IN.
○	54.000	72.000	8.000	1.250	6.198	5.313	5.313	2.549	2.549	2.549	6.198	5.313	5.313	2.549
□	54.000	72.000	8.000	1.250	6.198	5.313	5.313	2.549	2.549	2.549	6.198	5.313	5.313	2.549
◇	54.000	72.000	8.000	1.250	6.198	5.313	5.313	2.549	2.549	2.549	6.198	5.313	5.313	2.549

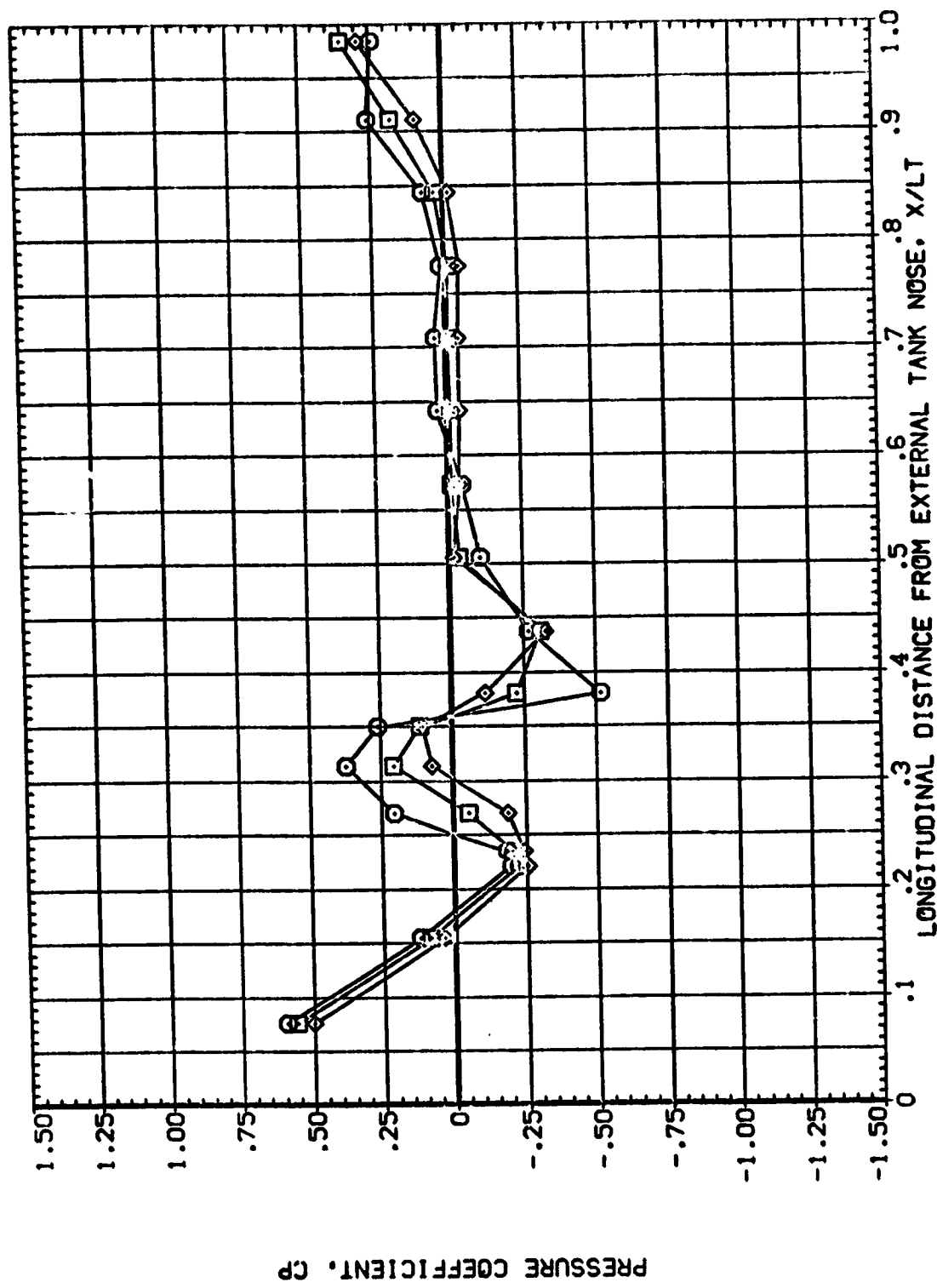


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82106)

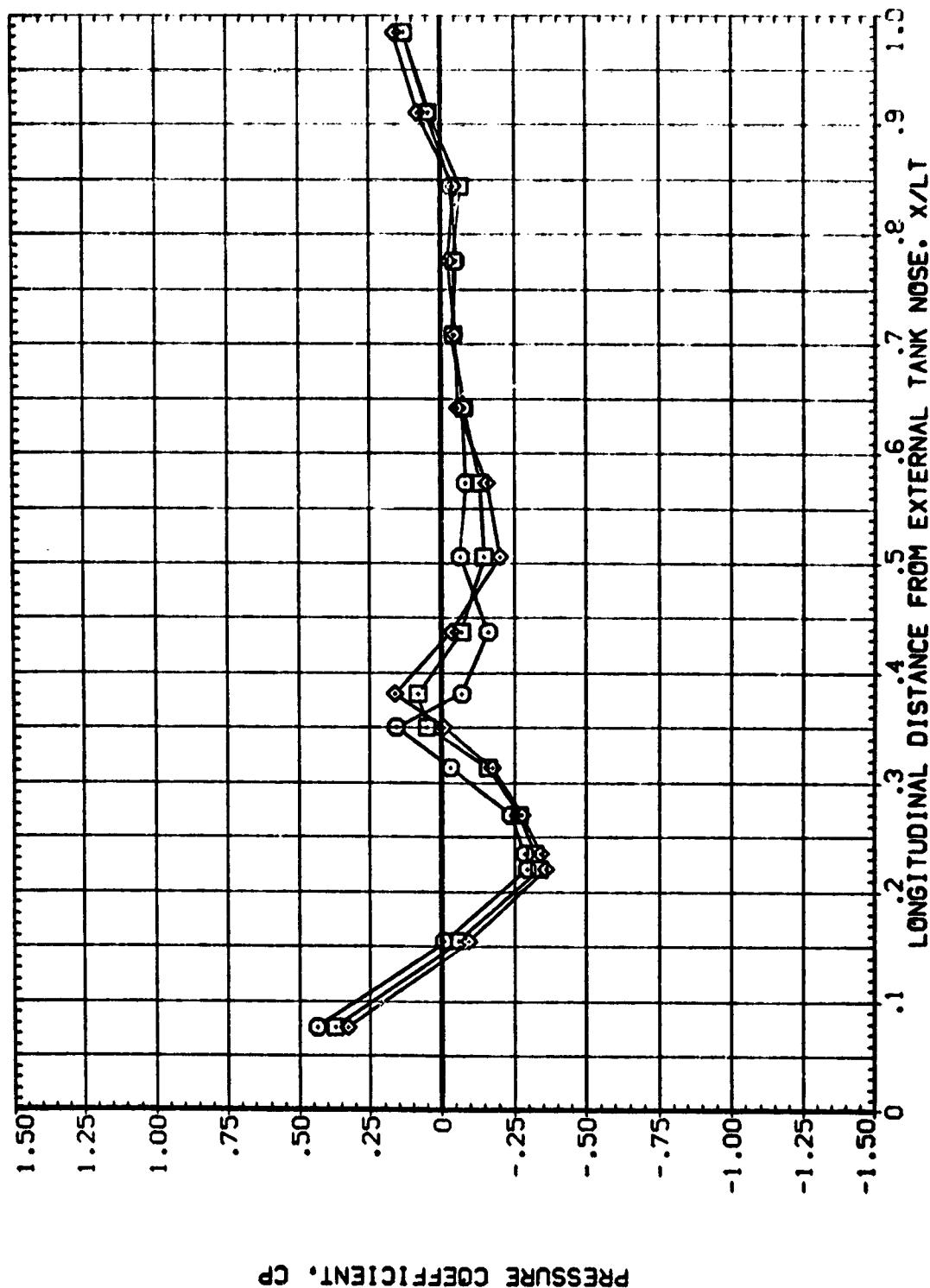
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SO. IN.	ALPHA	CONF IG
○	108.000	-8.000	1.250	6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	.000
□	126.000								IN.	X-SRB	.140
◇	144.000								IN.		.000
											.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SD, IN.	ALPHA	CONF IG	50,000
○	162.000	-8.000	1.250	5.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	180.000							IN.	X-SRB	.000	.000
◇	198.000							IN.		.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

**SYMBOL**   

PHI  
216.000  
234.000  
252.000

BETA	MACH
-8.000	1.250

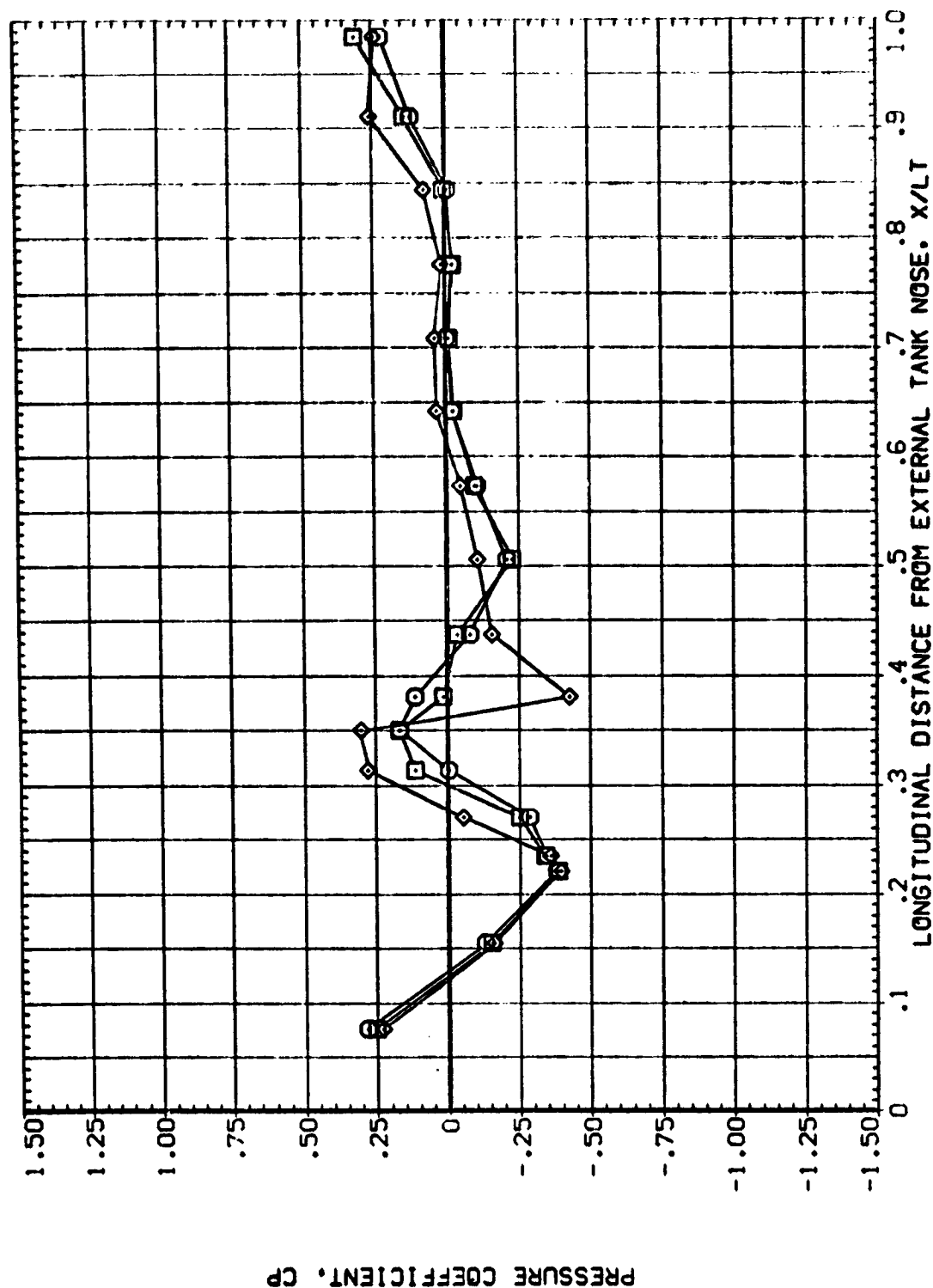
REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

59 IN.

ALPHA  
DELTA Z  
X-S28

PARAMETRIC VALUES	
.000	CONFIS
.140	RUDER
.000	ORIGIN

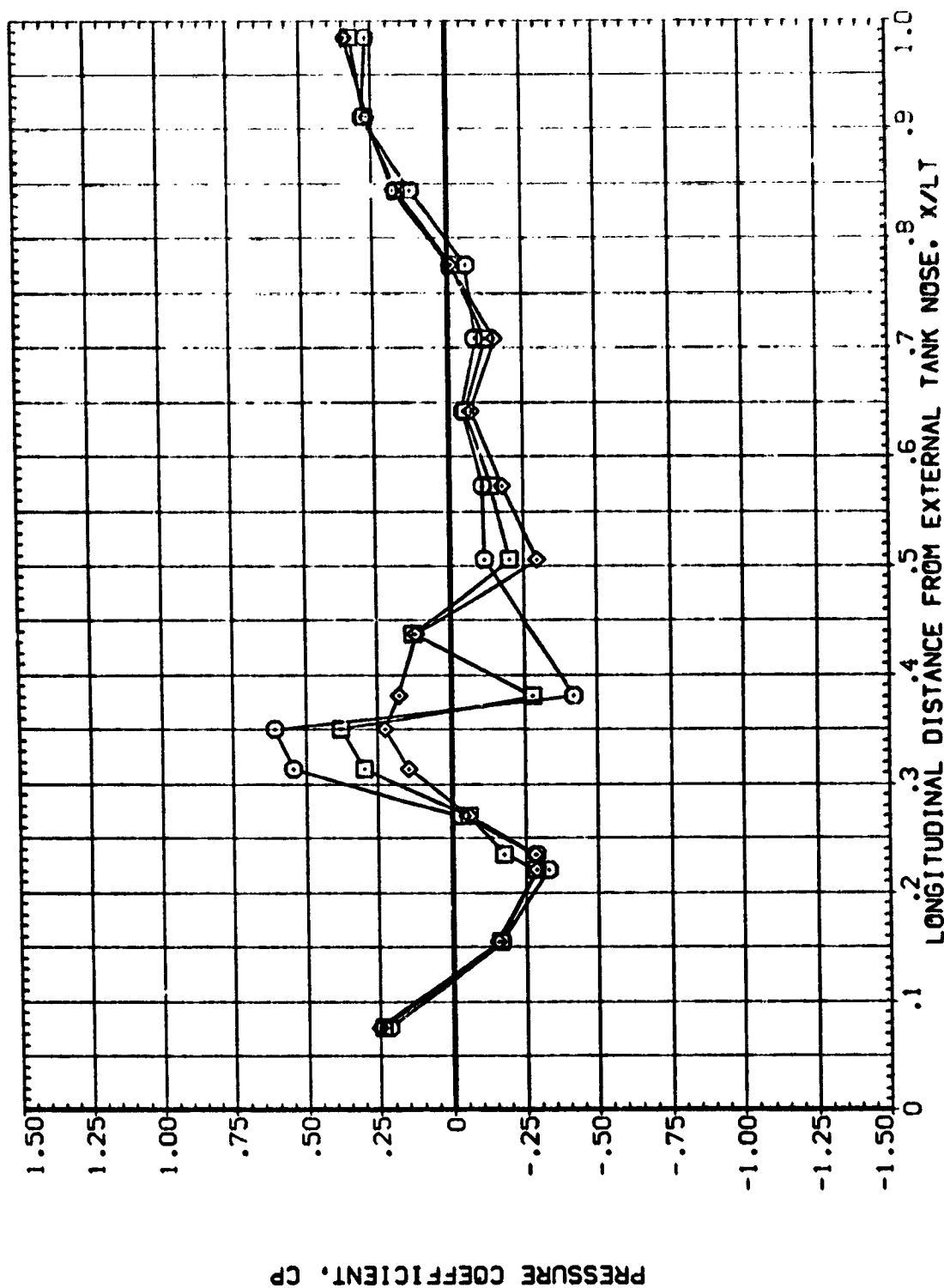
90.000  
.000  
.500



19 S3/2 S3/2 03 US  
PRESSURE DISTRIBUTION ON EXTERNAL TANK

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

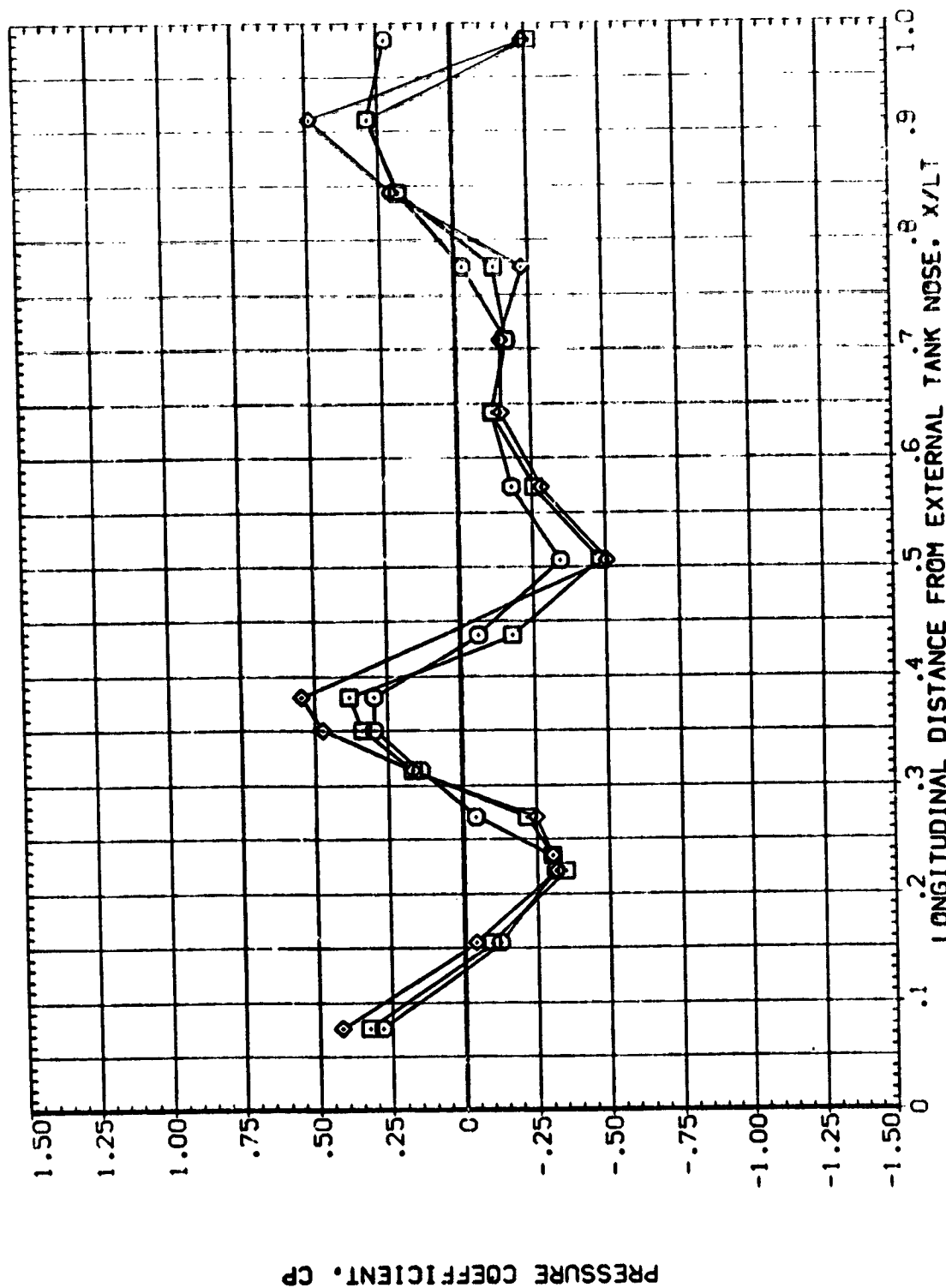
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	50. IN.	ALPHA	.000	CONF 15	90.000	
○	270.000	-8.000	1.250	LREF	5.313	IN.	DELTA Z	.140	RUDDER	.000	
□	288.000			BREF	5.313	IN.	X-SRB	.000	ORBIT INC	.500	
◇	306.000			XMRP	2.549	IN.					
				YMRP	.000	IN.					
				ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

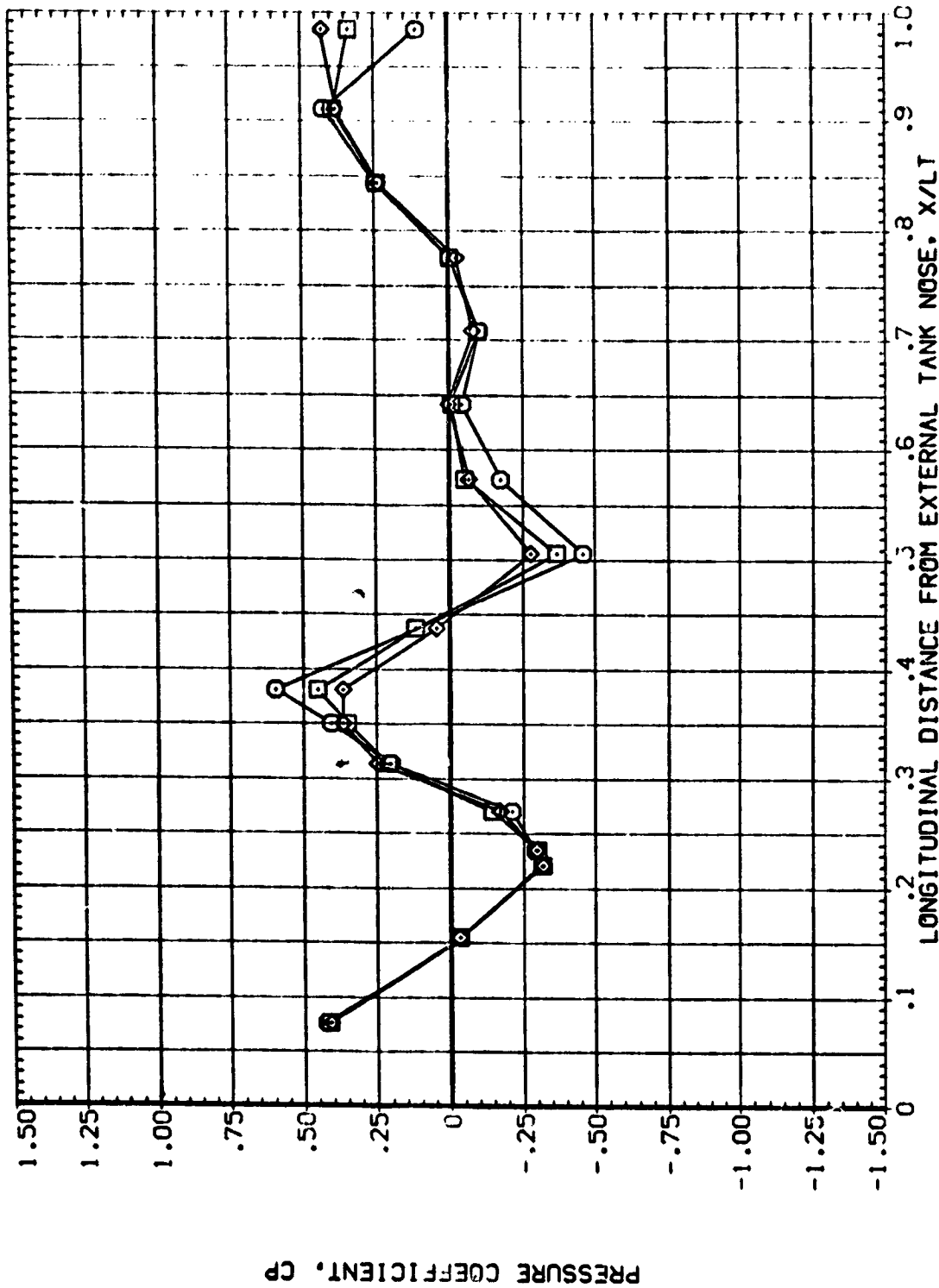
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	IN.	ALPHA	DELTA Z
□	324.000	-8.000	1.250	6.198	5.313	5.313	2.549	IN.	IN.	CONFIS	90.000
○	342.000							IN.	IN.	RODER	.000
◇	360.000							IN.	IN.	DRBINC	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK(A82106)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	CONF IG	CONF IG	CONF IG	CONF IG
□	.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.000
◇	18.000							.000	.000	.000	.500
◇	36.000							.000	.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82106)

SYMBOL  
□  
◇

PHI 54.000  
72.000  
90.000

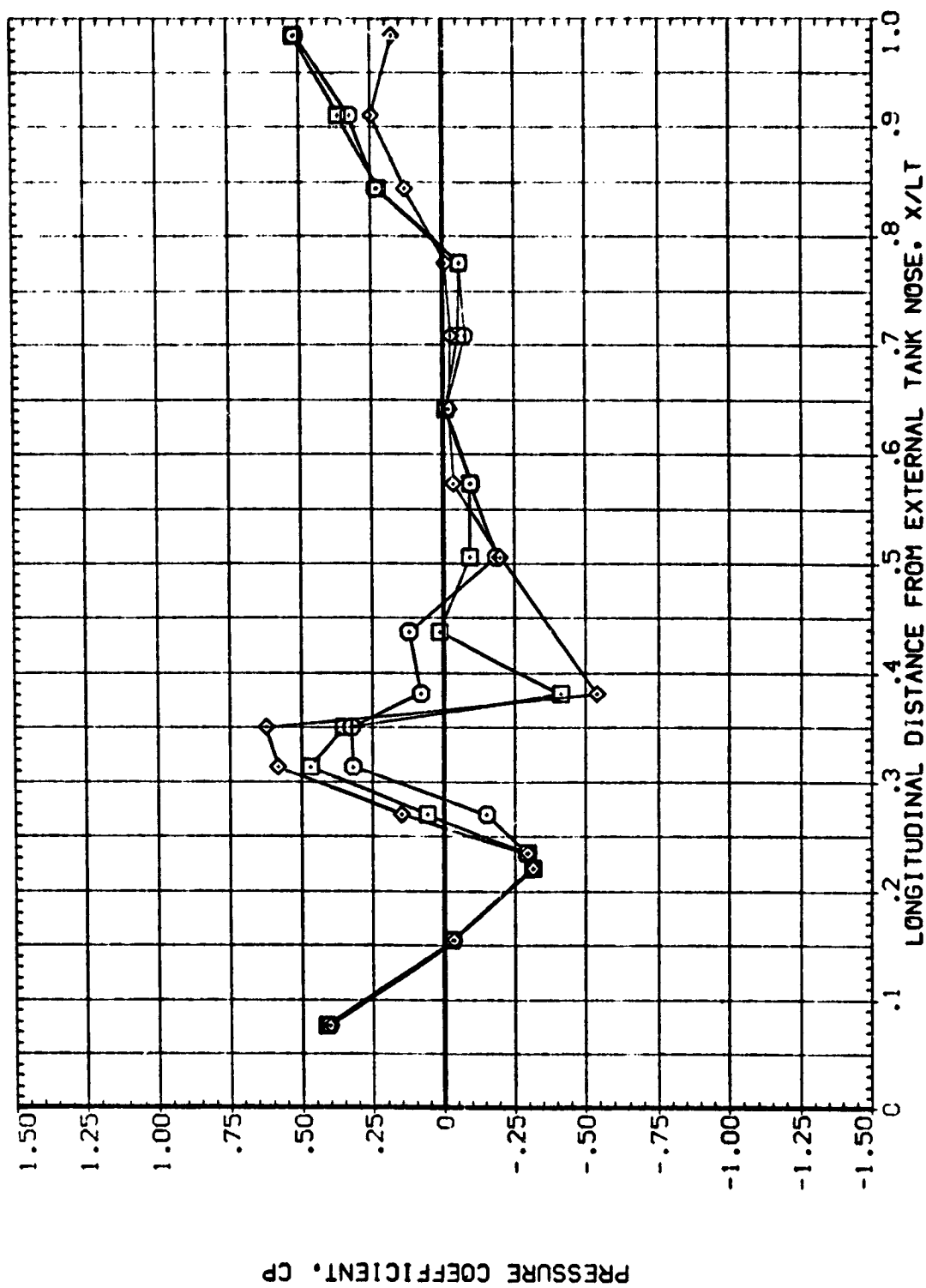
BETA .000 MACH 1.250

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SQ. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTAZ  
X-SRB

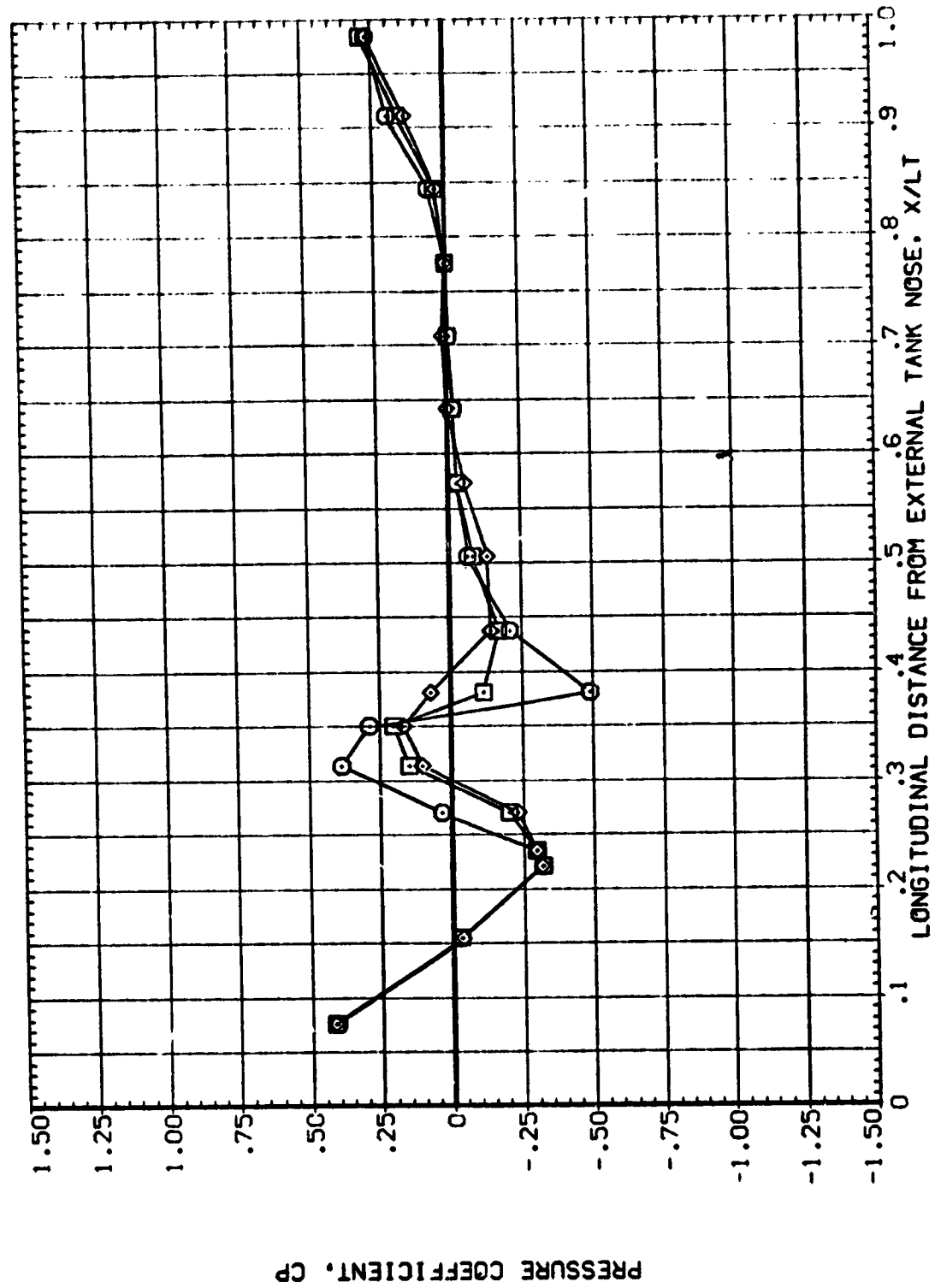
PARAMETRIC VALUES  
.000 CONF IG  
.140 RUDDER  
.000 ORB INC  
90.000  
.000  
.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTA Z
○	108.000	.000	1.250	5.198	5.313	5.313	2.549	.000	.000	.000	.140
□	126.000	.000	1.250	5.198	5.313	5.313	2.549	.000	.000	.000	.140
◇	144.000	.000	1.250	5.198	5.313	5.313	2.549	.000	.000	.000	.140

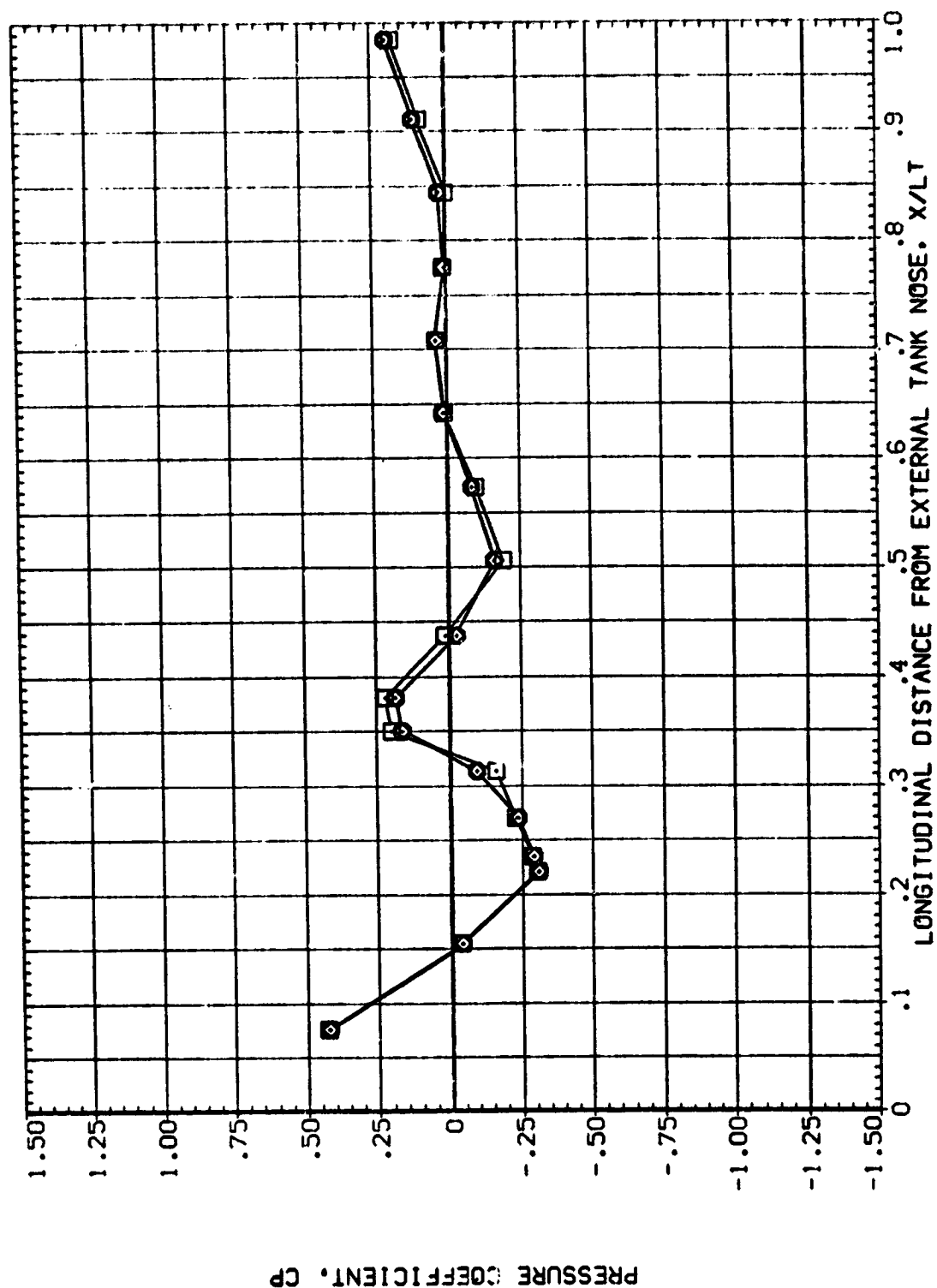


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

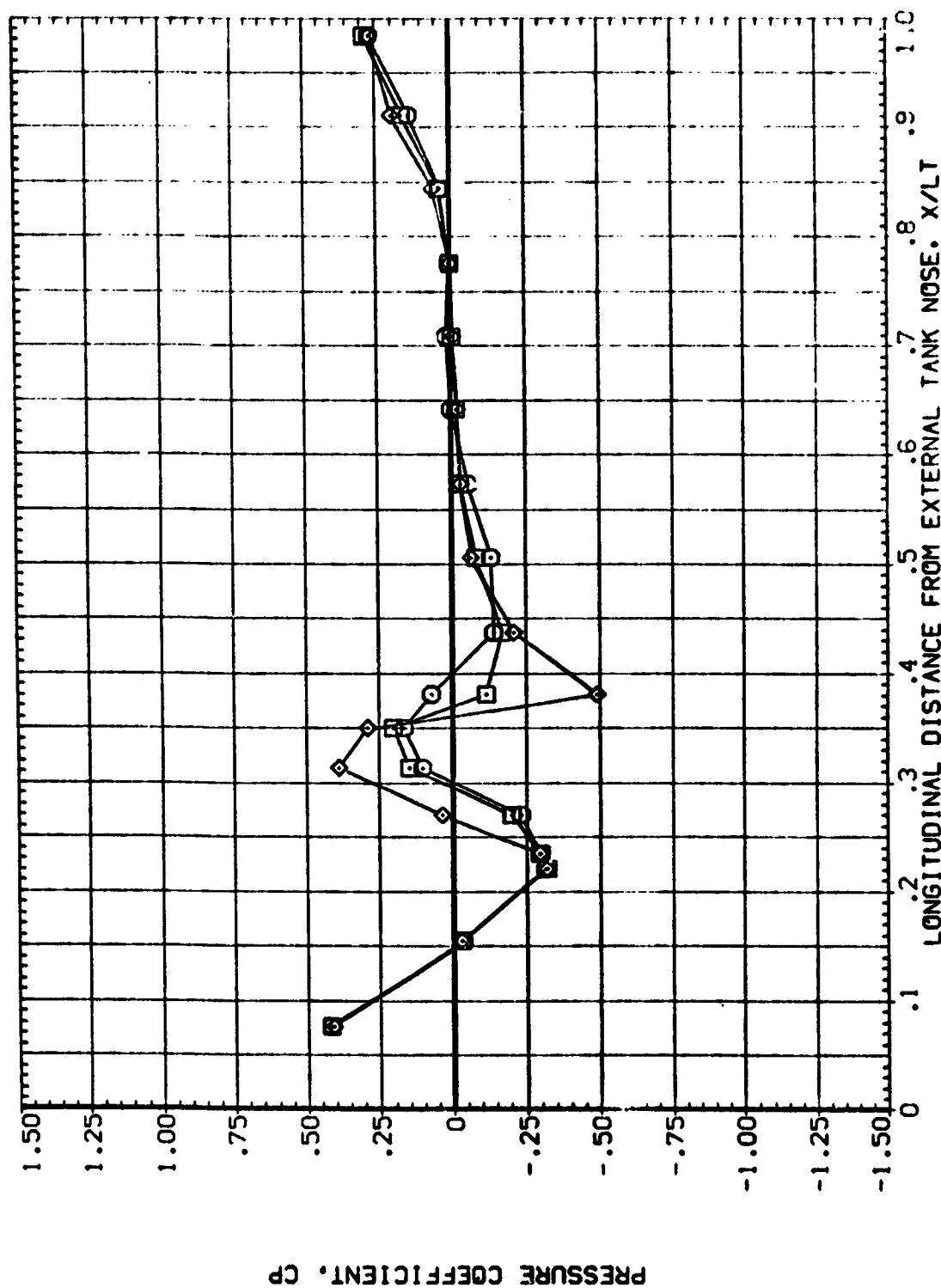
SYMBOL	PH	BETA	MACH	REFERENCE DATA	ALPHA	PARAMETRIC VALUES
○	162.000	.000	1.250	SREF 6.198	.000	CONF IG 90.000
□	180.000			LREF 5.313	.140	RUDDER .000
◇	198.000			BREF 5.313	.000	CRB INC .500
				XMRP 2.549		
				YMRP .000		
				ZMRP .000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82106)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ALPHA	DELTA Z	CONF IG	90.000
□	216.000	.000	1.250	6.198	5.313	5.313	2.549	.000	.140	RUDDER	.000
◇	234.000							X-SRB	.000	ORB IN C	.500
◇	252.000										

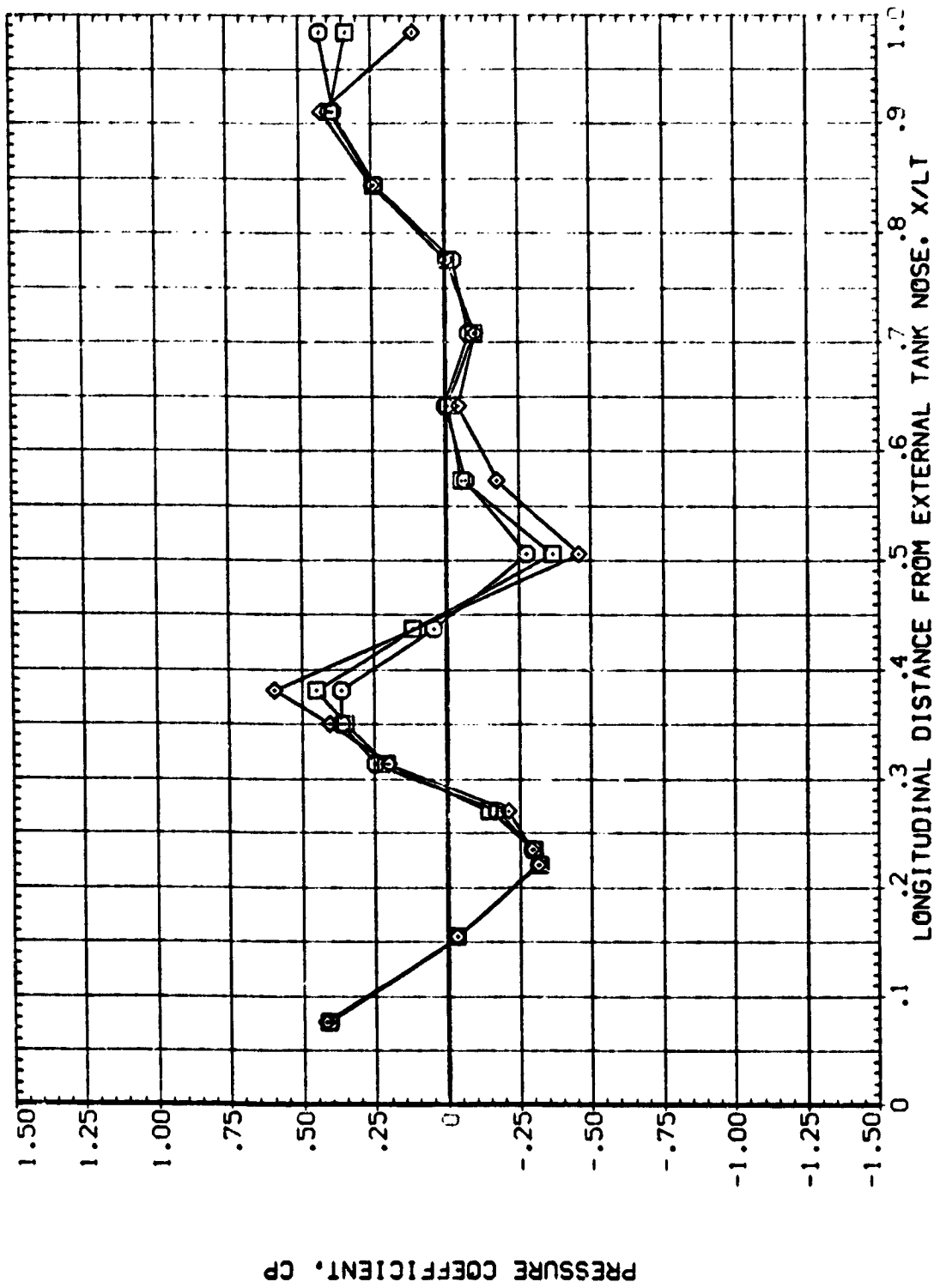


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

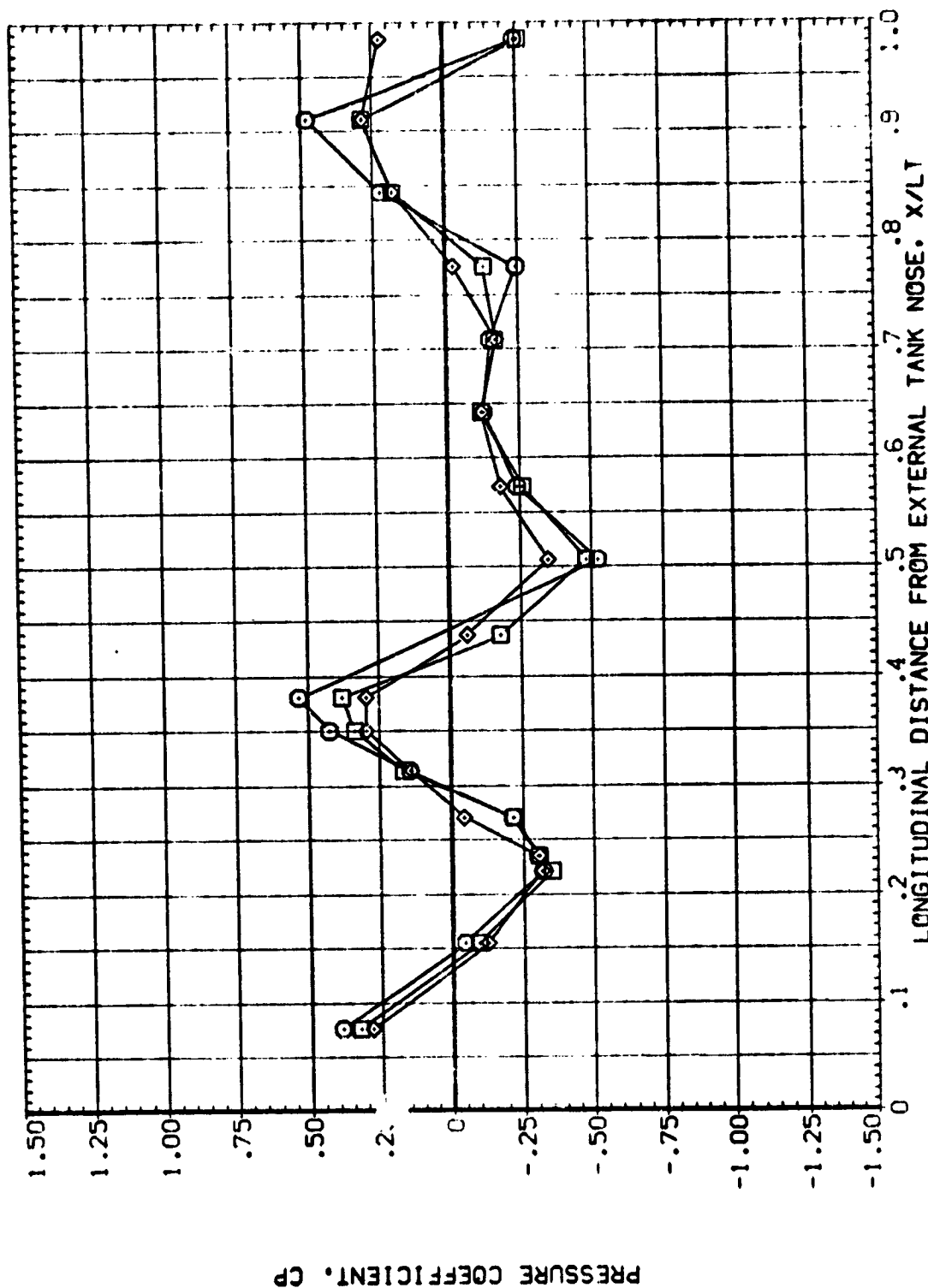
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONFIS	
○	324.000	.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	CONFIS
□	342.000							IN.	X-SRC	.140	RLODER
◇	360.000							IN.		.000	ORBNIC
								IN.		.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

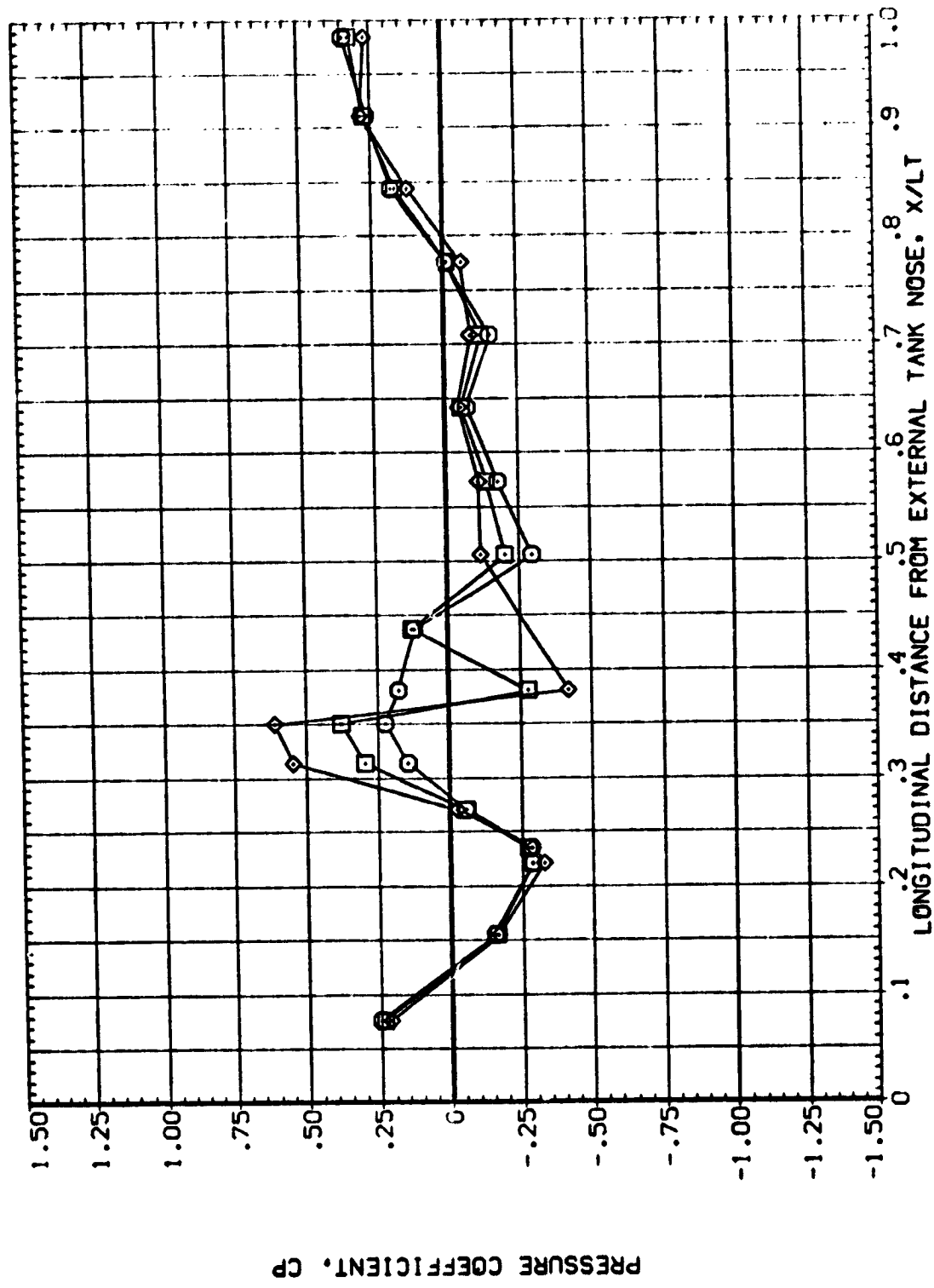
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IG	90.000
□	.000	8.000	1.250	LREF	IN.	DELTA Z	.000
◇	18.000			BREF	IN.	X-SRB	.140
	36.000			XMRP	IN.	OSBINC	.000
				YMRP	IN.		.500
				ZMRP	IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI		BETA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	54.000	72.000	8.000	8.000	1.250	1.250	SREF	6.198	SO. IN.	ALPHA	CONF IG	50.000	CONF IG	50.000
◇	54.000	72.000	8.000	8.000	1.250	1.250	LREF	5.313	IN.	DELTA Z	RUDDER	.000	.140	.000
□	72.000	90.000					BREF	5.313	IN.	X-SRB	OSB INC	.000	.000	.500
◇	90.000						YMRP	2.549	IN.					
							ZMRP	.000	IN.					



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL  
 □  
 ○  
 ◇

PMI  
 108.000  
 126.000  
 144.000

BETA  
 8.000

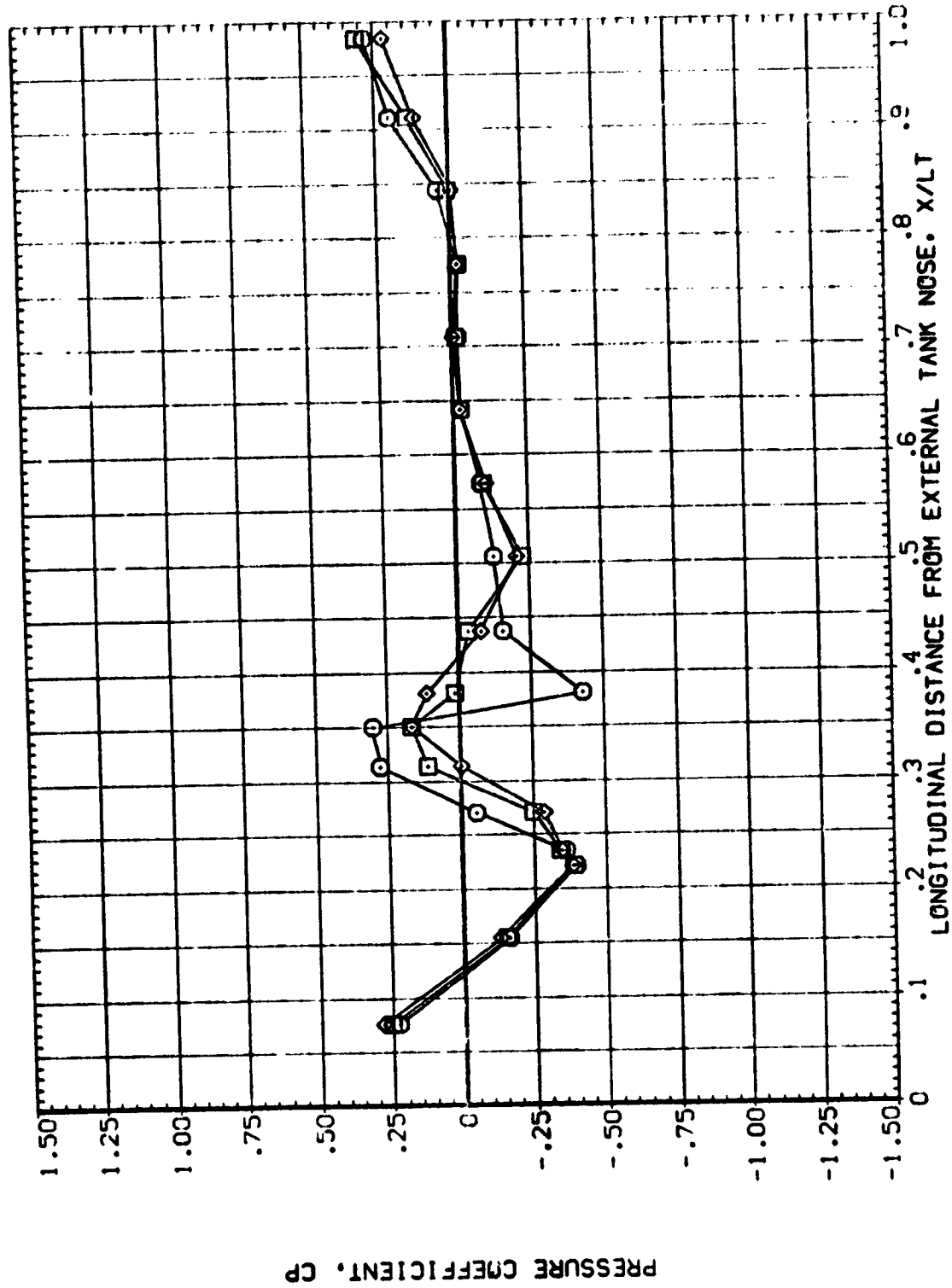
MACH  
 1.250

REFERENCE DATA  
 SREF 5.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

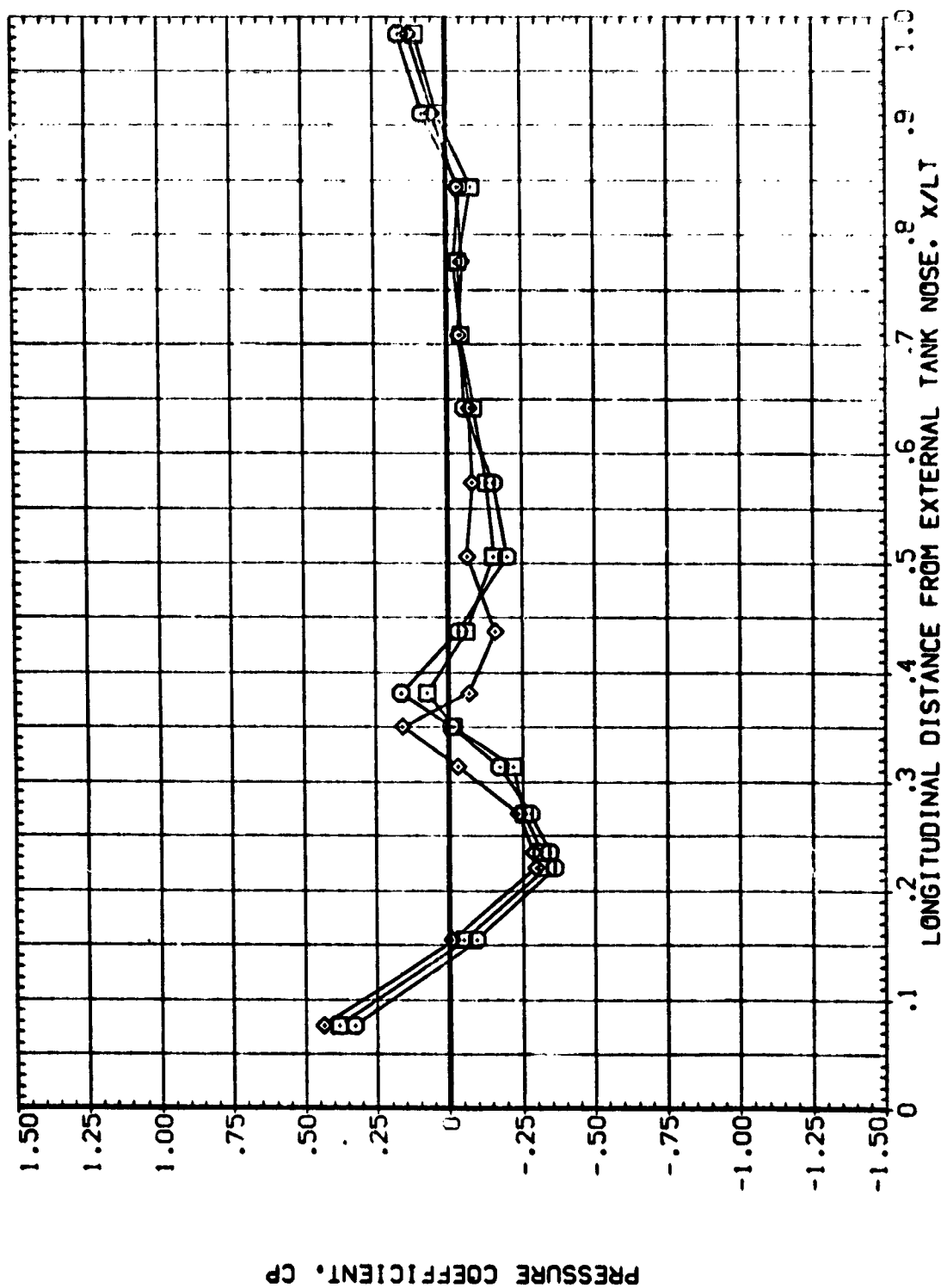
PARAMETRIC VALUES  
 .000 CONFIG  
 .140 RUDDER  
 .000 SRB INC  
 90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SD. IN.	ALPHA	CONF 15
□	162.000	8.000	1.250	LREF	5.313	DELTA Z	.000
□	180.000			BREF	5.313	X-SRB	.140
◇	198.000			XMRP	2.549		.000
				YMRP	.000		.500
				ZMRP	.000		.500

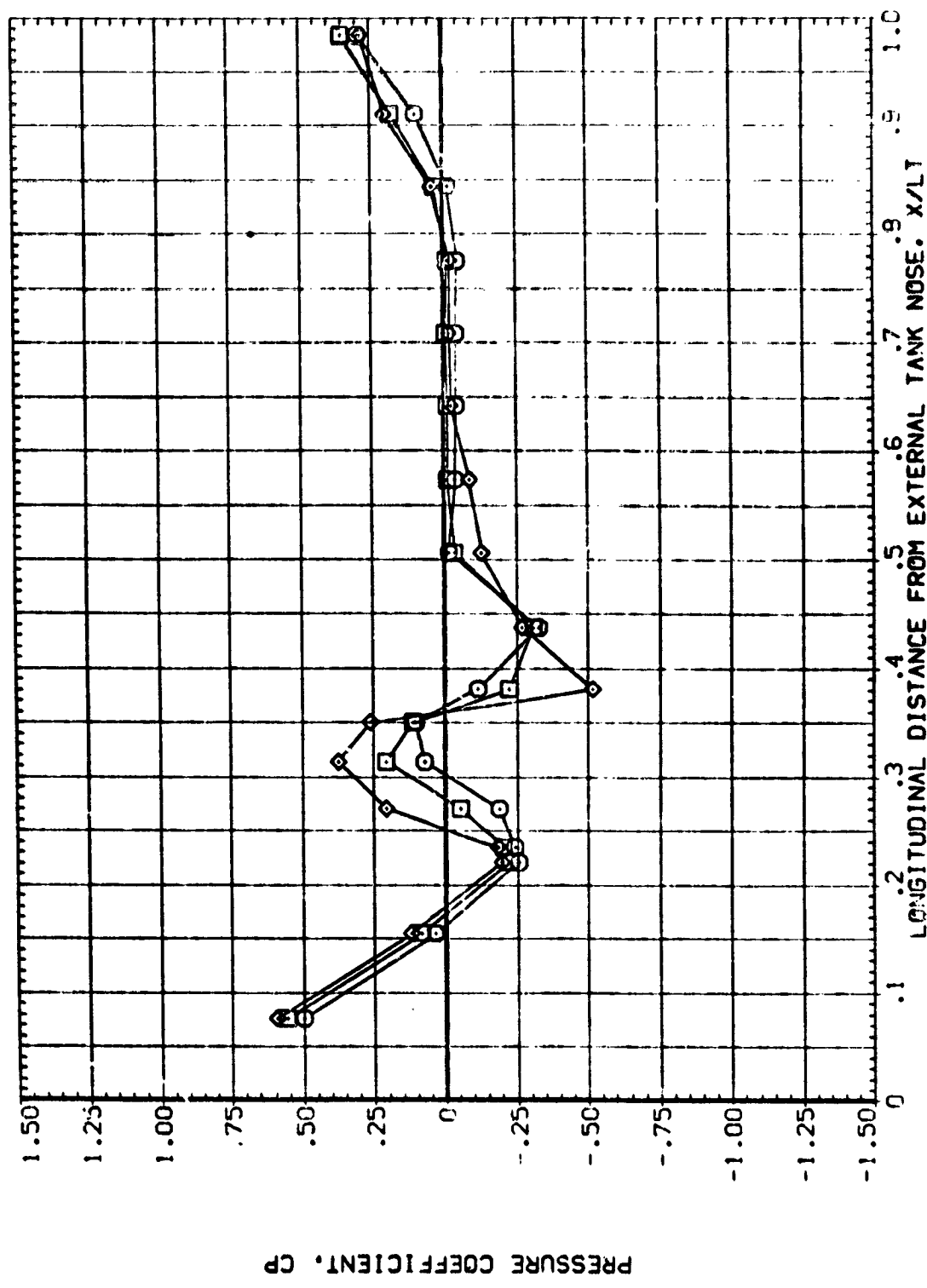


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



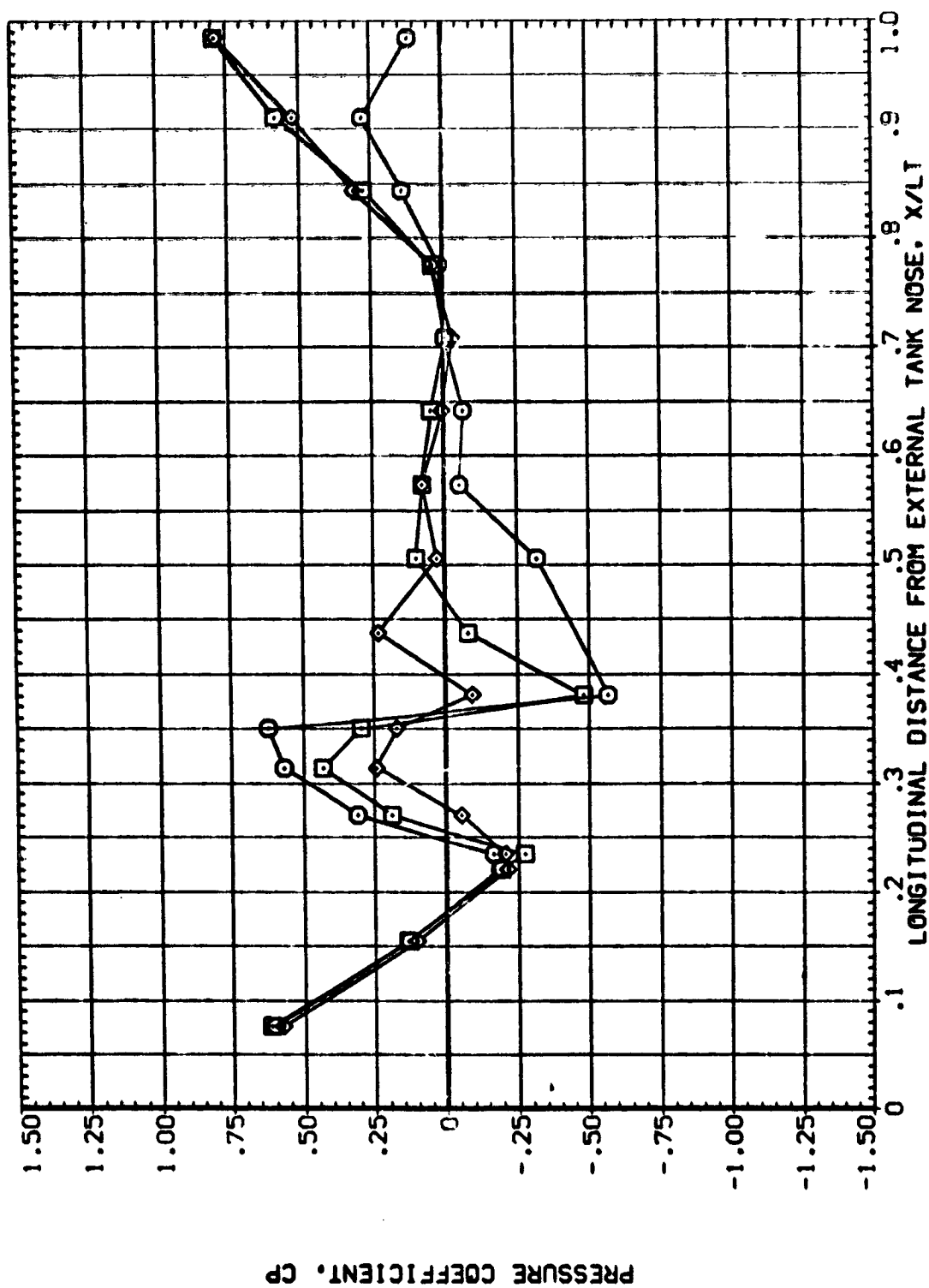
MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONFIS	CONFIS	CONFIS
□	216.000	8.000	1.250	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	234.000							X-SRB	.000	.000	.500
◇	252.000										



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

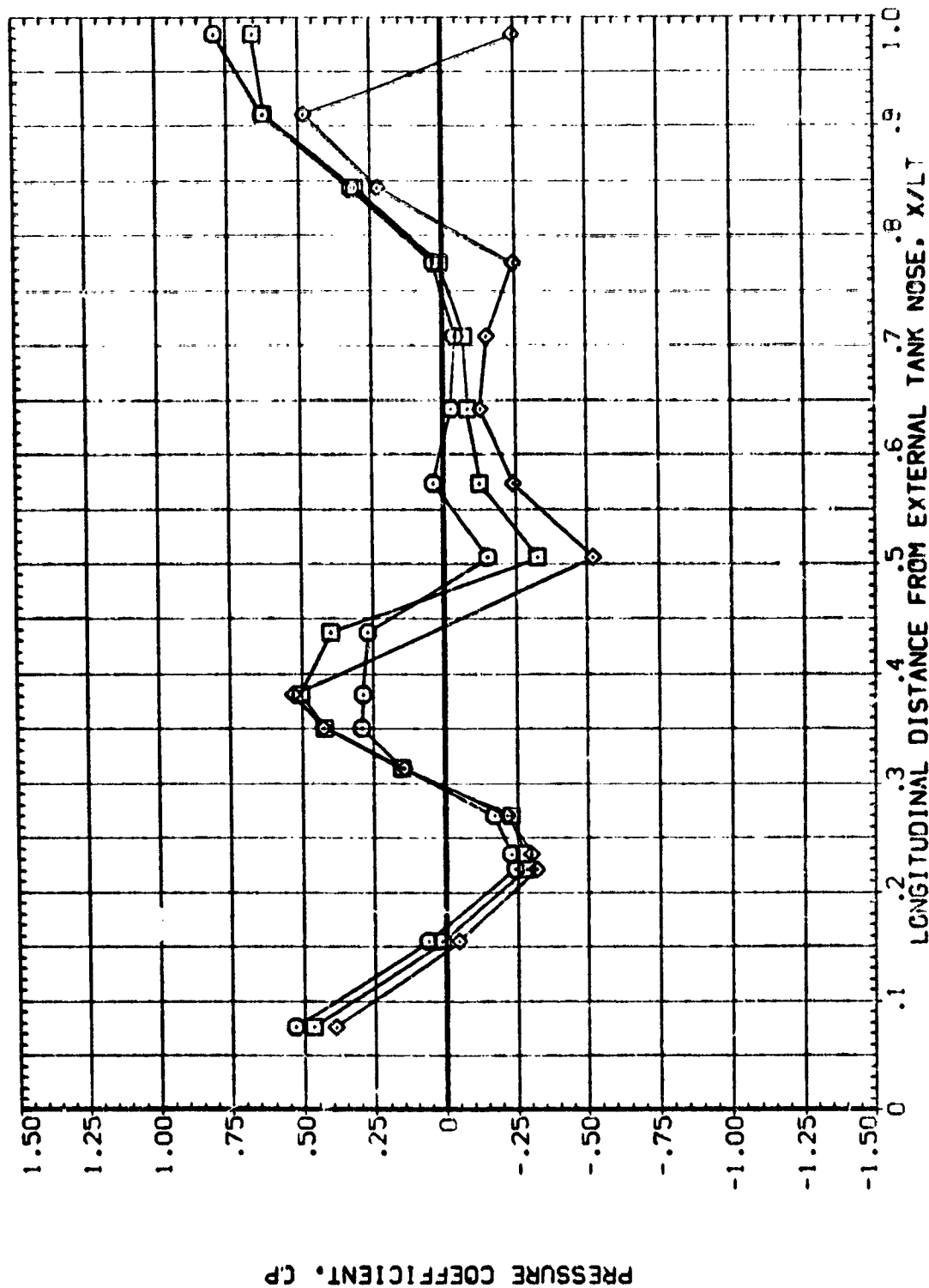
005.  
000.  
000.05



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

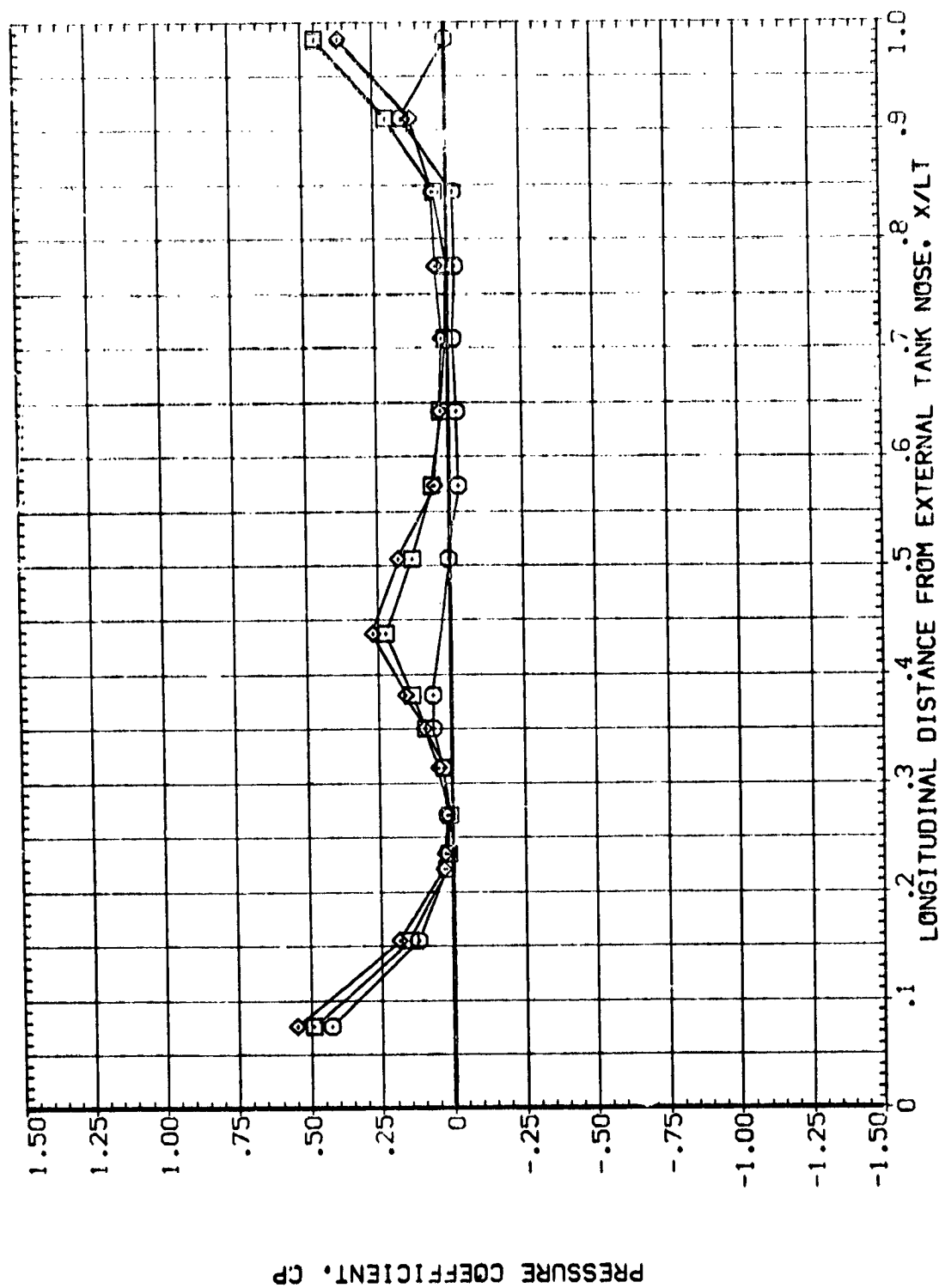
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SG. IN.	ALPHA	DELTA Z	X-SRB
◇	324.000	8.000	1.250	6.198	5.313	5.313	2.549	IN.	.000	.000	.000
□	342.000							IN.	.140	.000	.000
◇	360.000							IN.	.000	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

C. 4

SYMBOLS

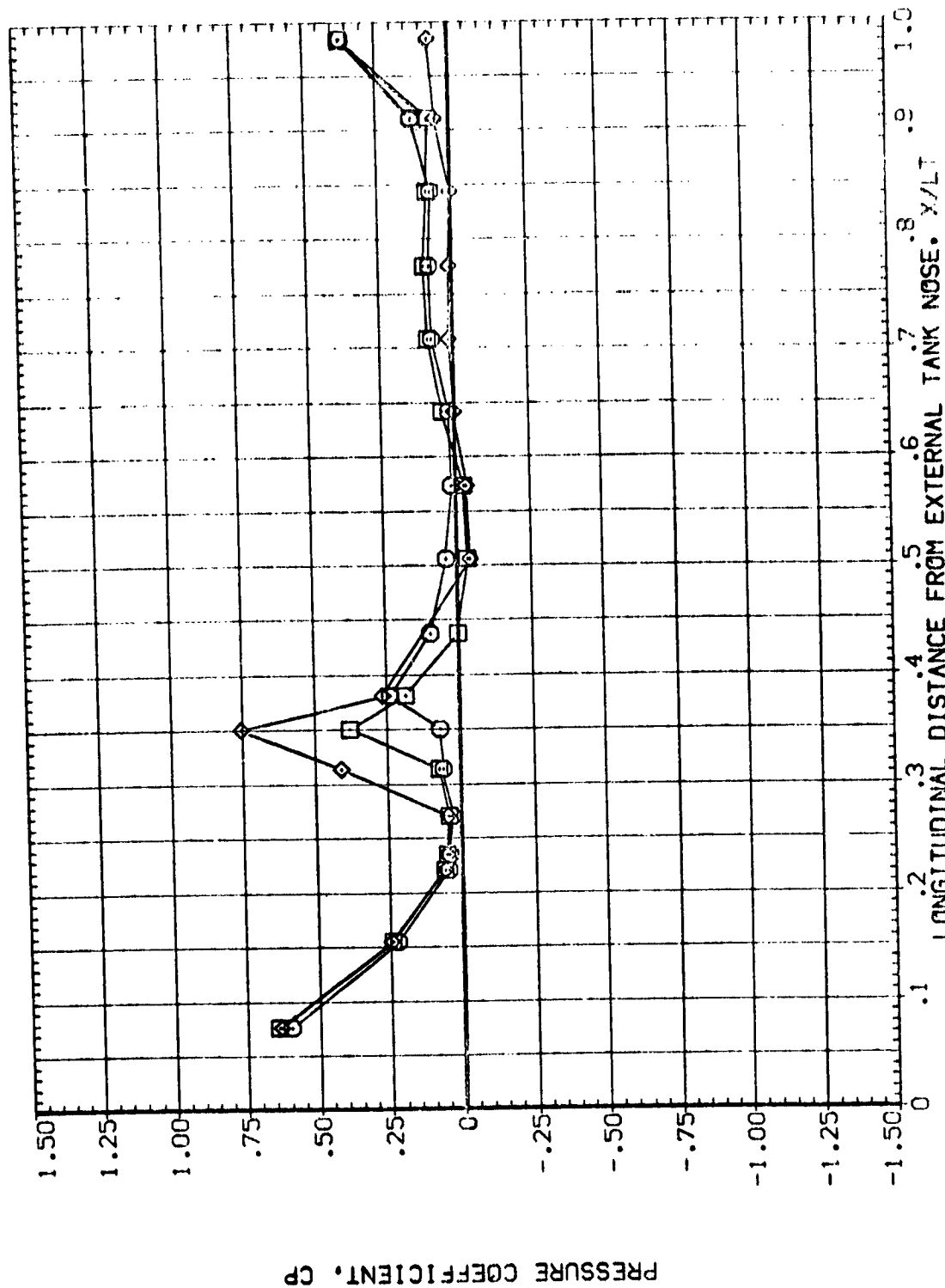


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

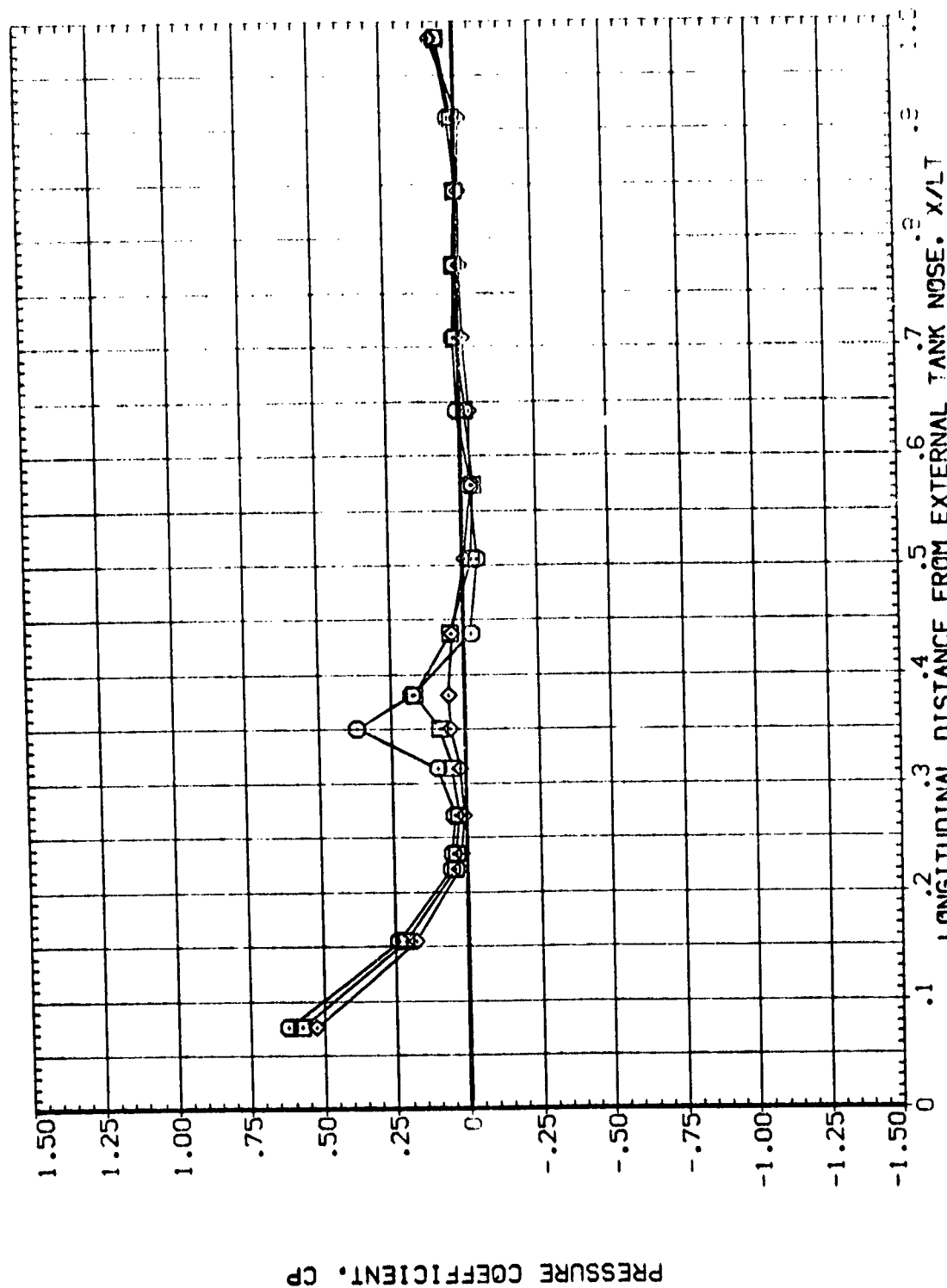
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	CONFIS	RUDCER
□	54.000	-8.000	3.500	6.198	5.313	5.313	2.548	.000	.000	.000	.000
◇	72.000									.140	.000
◇	90.000									.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF IG	90.000
○	108.000	-8.000	3.500	5.313	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	126.000							IN.	X-SRB	.140	.000
◇	144.000							IN.		.000	.500
								IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 162.000  
 180.000  
 198.000

BETA  
 -8.000

MACH  
 3.500

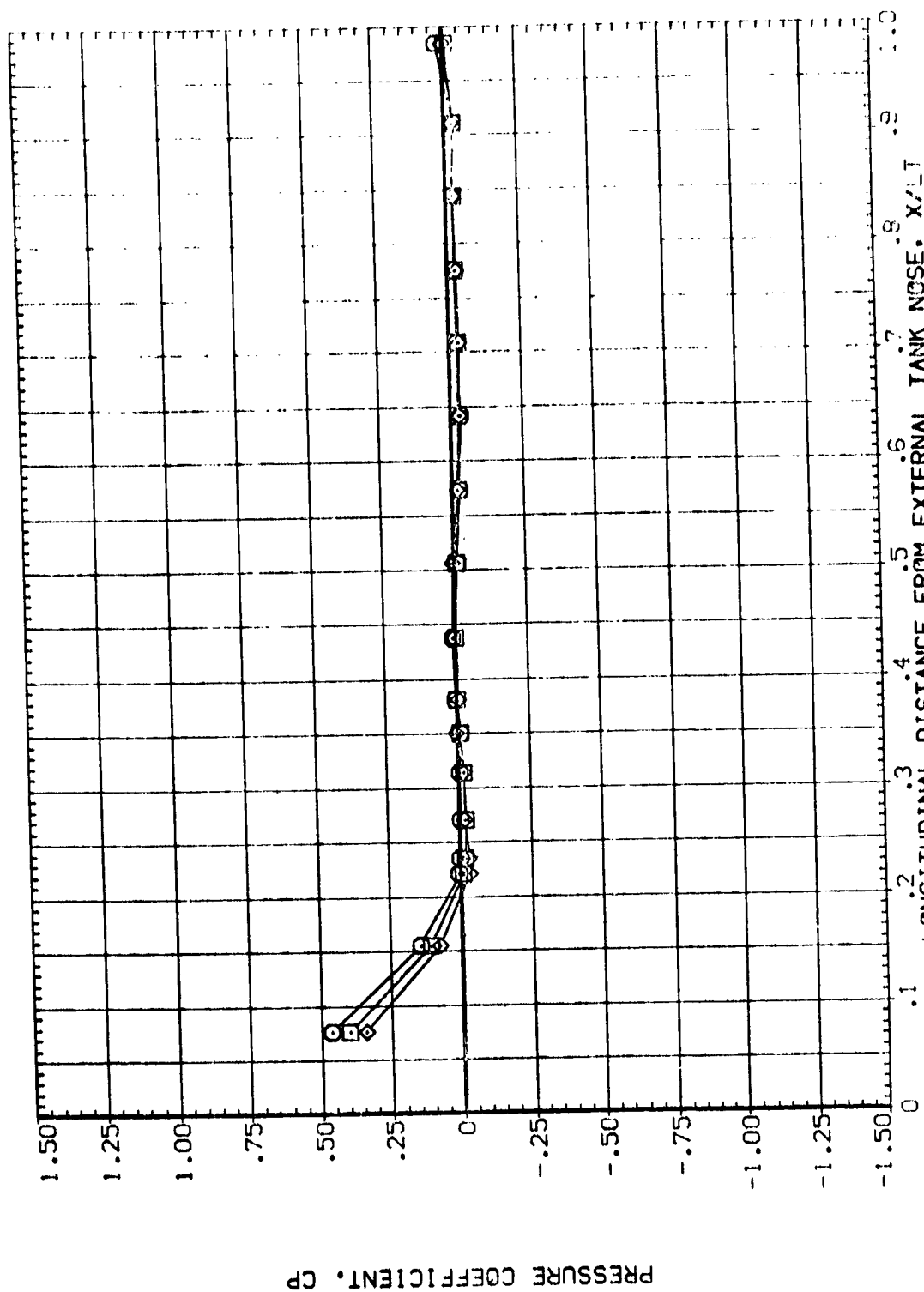
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000  
 .000  
 .140  
 .000  
 .000  
 .500

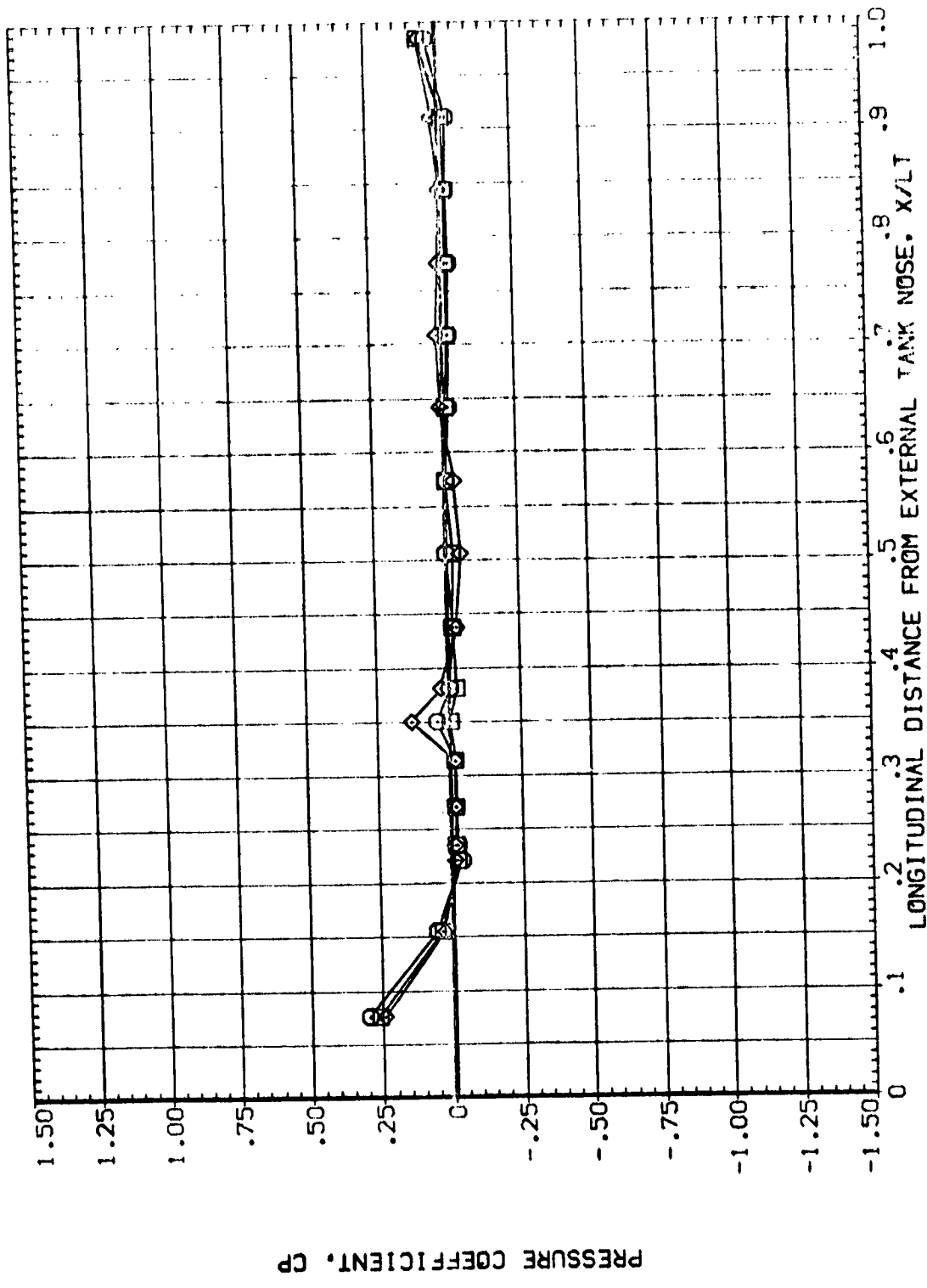
90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A821C6)

SYMBOL		PHI	BETA	MACH	REFERENCE DATA		SQ. IN.		ALPHA		PARAMETRIC VALUES	
○ □ ◇	216.000	-8.000	3.500	SREF	6.198	IN.	DELTA Z	.000	CD <sub>F</sub> IG	90.000		
	234.000			LREF	5.313	IN.	X-SFB	.140	RUDDER	.000		
	252.000			BREF	5.313	IN.		.000	CRANE	.500		
				XMRP	2.549	IN.						
				YMRP	.000	IN.						
				ZMRP	.000	IN.						

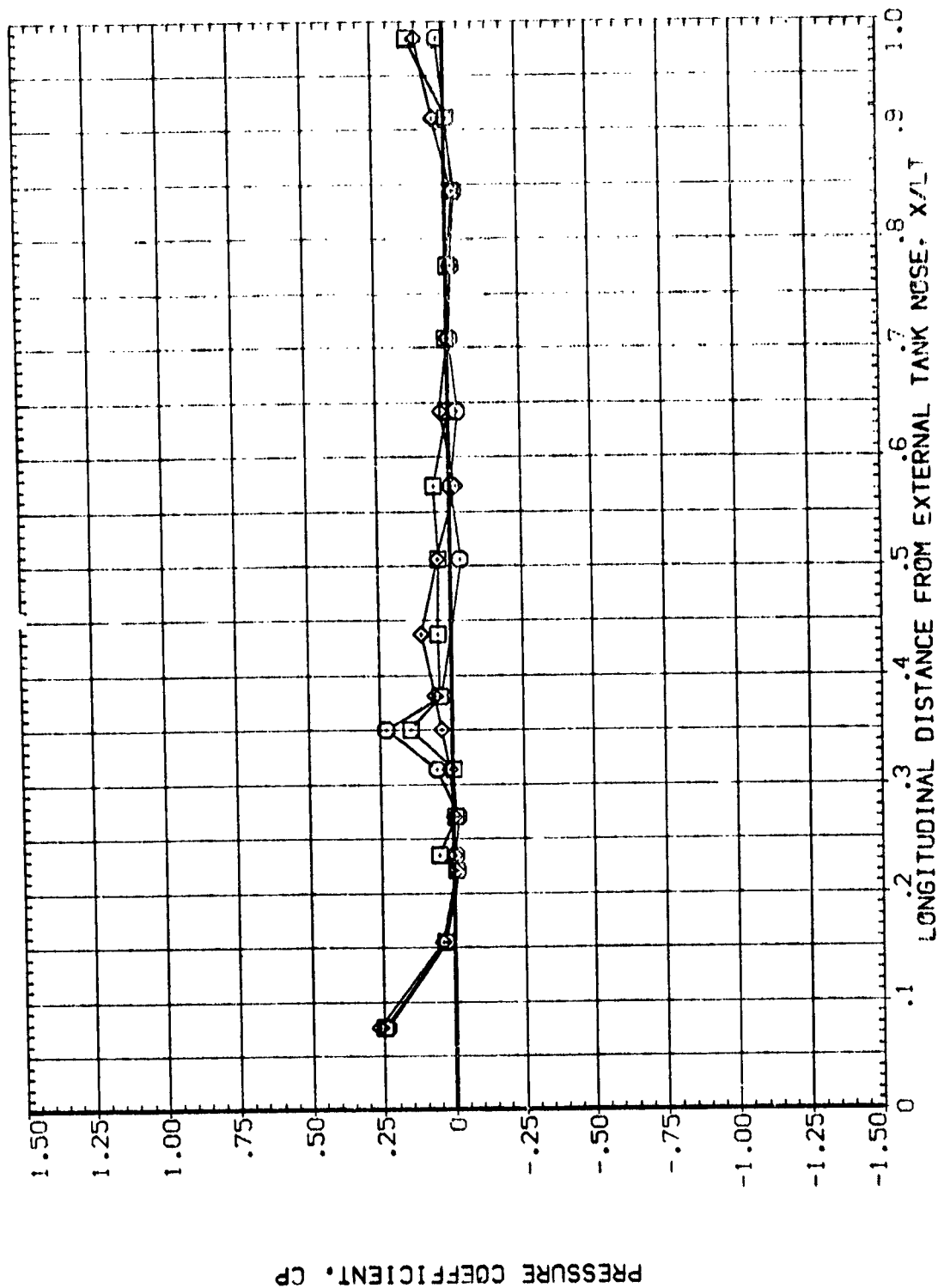


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T06)

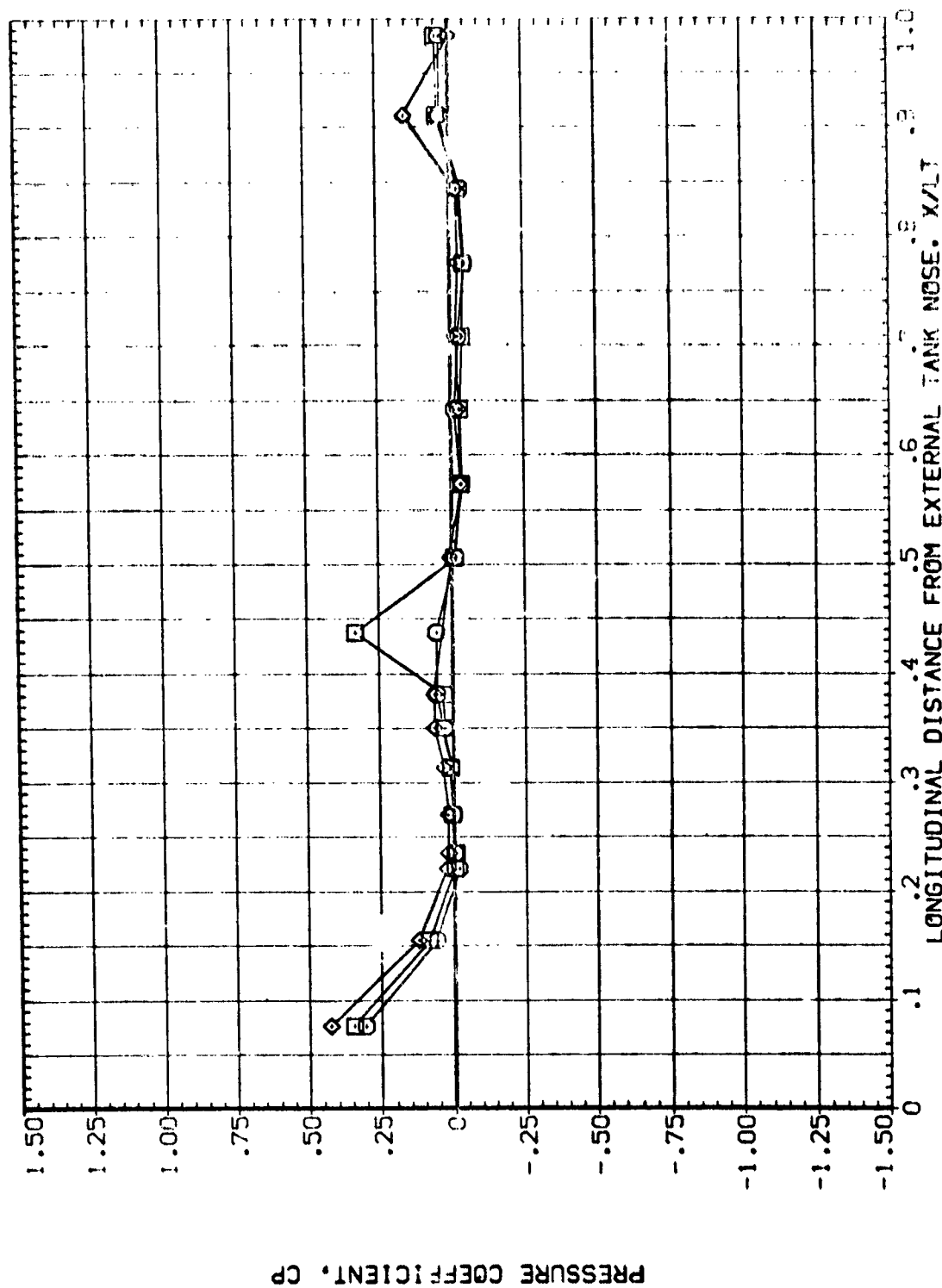
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	6.198	ALPHA	CONFIS
○	270.000	-8.000	3.500	LREF	5.313	DELTAZ	.000
□	268.000			BREF	5.313	R-DIER	.000
◇	306.000			XMRP	2.549	X-S98	.000
				YMRP	.000	DS-NC	.500
				ZMRP	.000		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106)

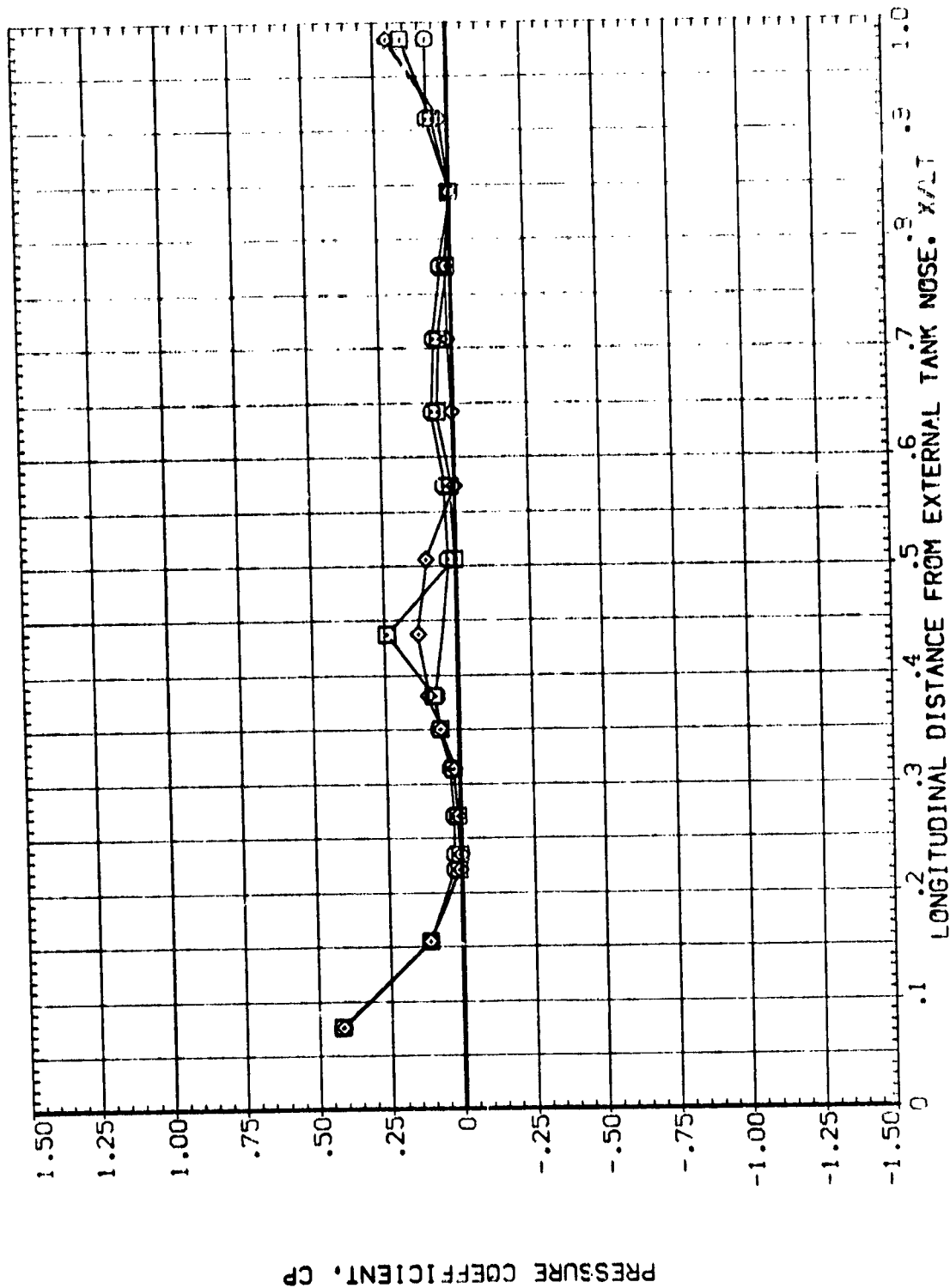
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONFIS	90.000
□	324.000	-8.000	3.500	LREF	IN.	CELTAZ	.000
◇	342.000			BREF	IN.	PLDER	.000
	360.000			YMRP	IN.	X-S98	.500
				ZMRP	IN.		



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
				SREF	6.198	SO. IN.	CONFUS	90.000	
□	.000	.000	3.500	LREF	5.313	IN.	.000	.000	
◇	18.000			BREF	5.313	IN.	.140	.000	
	36.000			XMRP	2.549	IN.	.000	.000	
				YMRP	.000	IN.	.000	.000	
				ZMRP	.000	IN.	.000	.000	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82106)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 54.000  
 72.000  
 90.000

BETA  
 .000  
 3.500

MACH

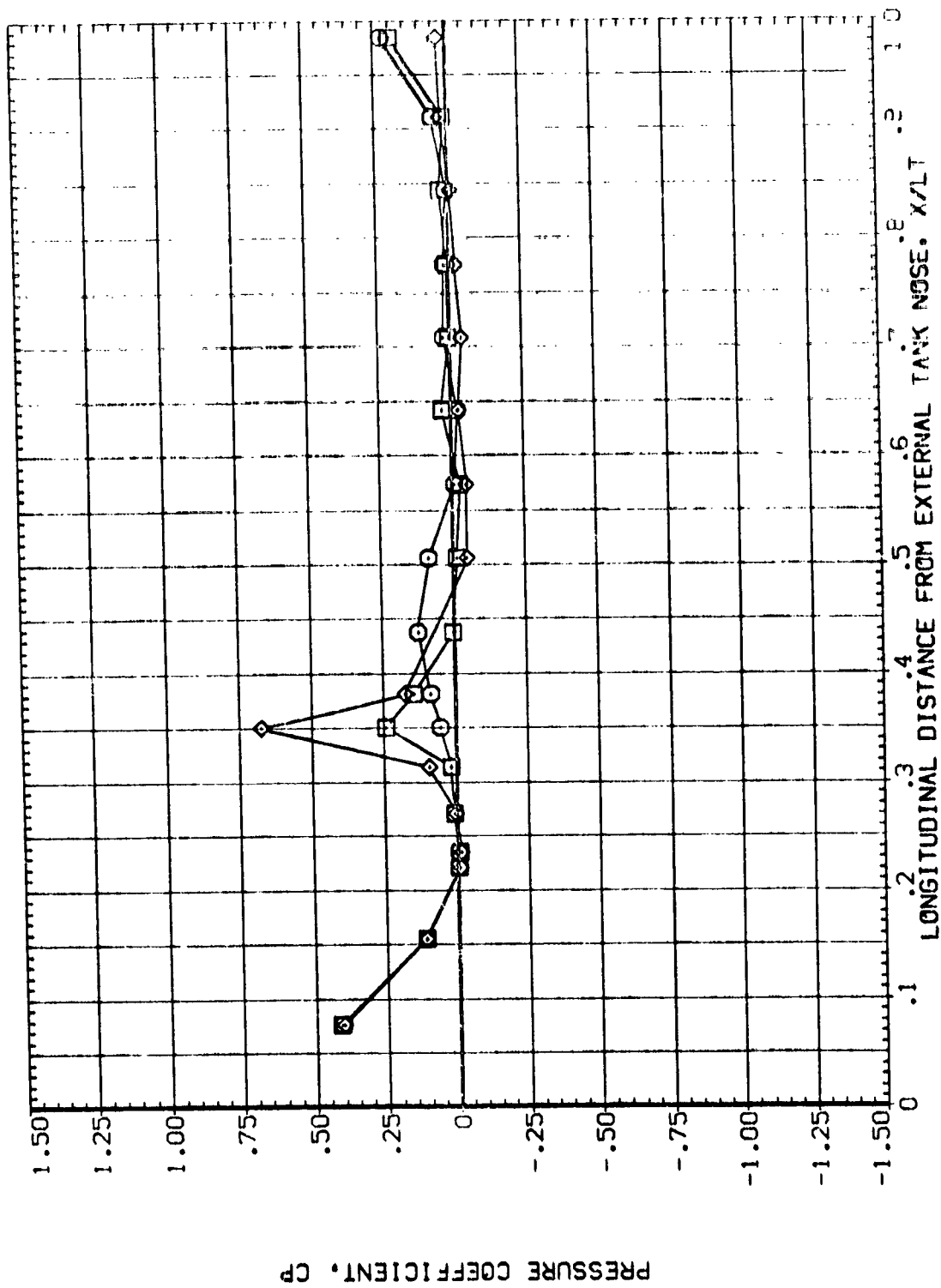
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000  
 .040  
 .000  
 .000  
 .500

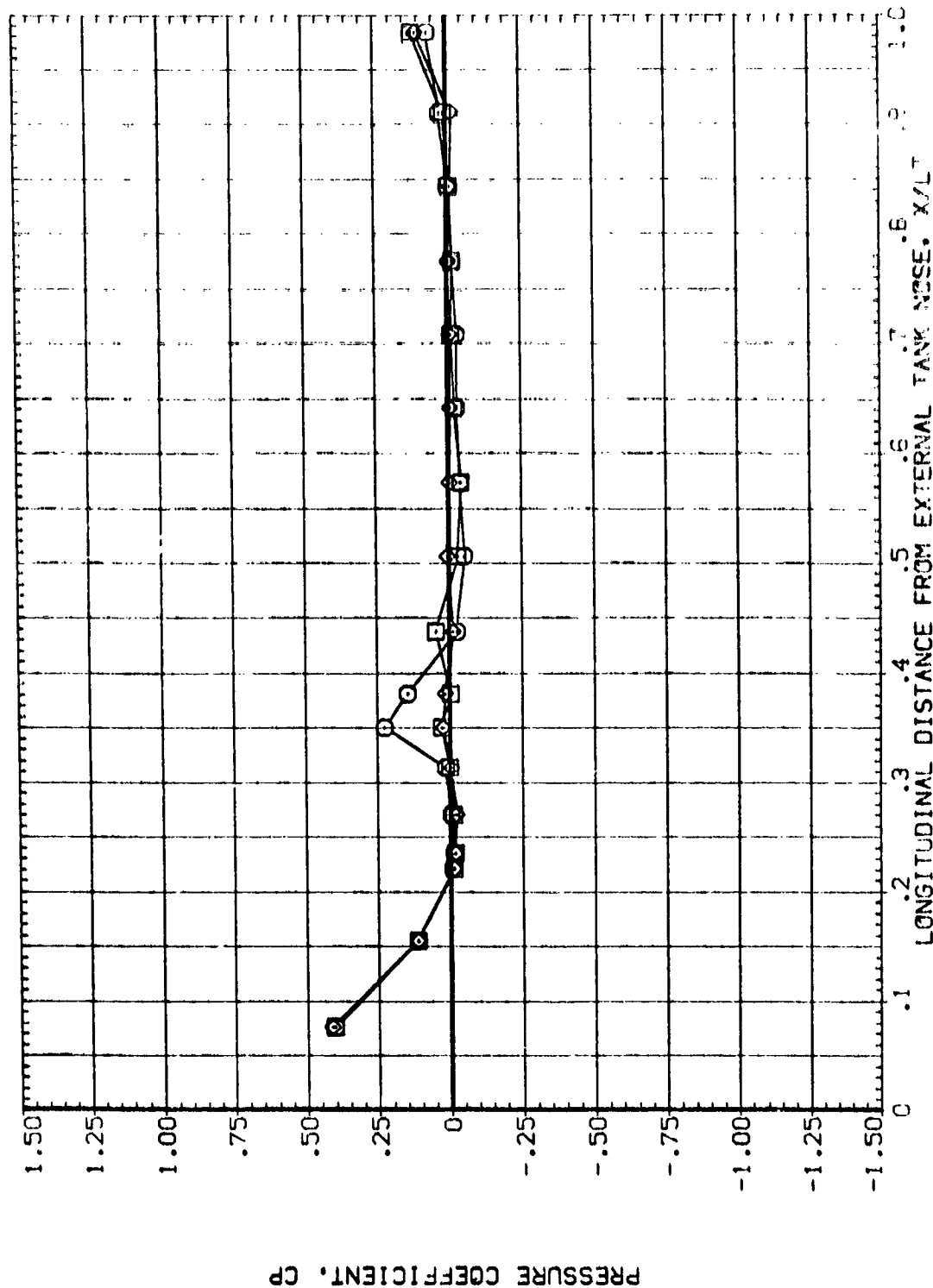
90.000  
 .000  
 .500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 03 U5 EXTERNAL TANK(A82T05)

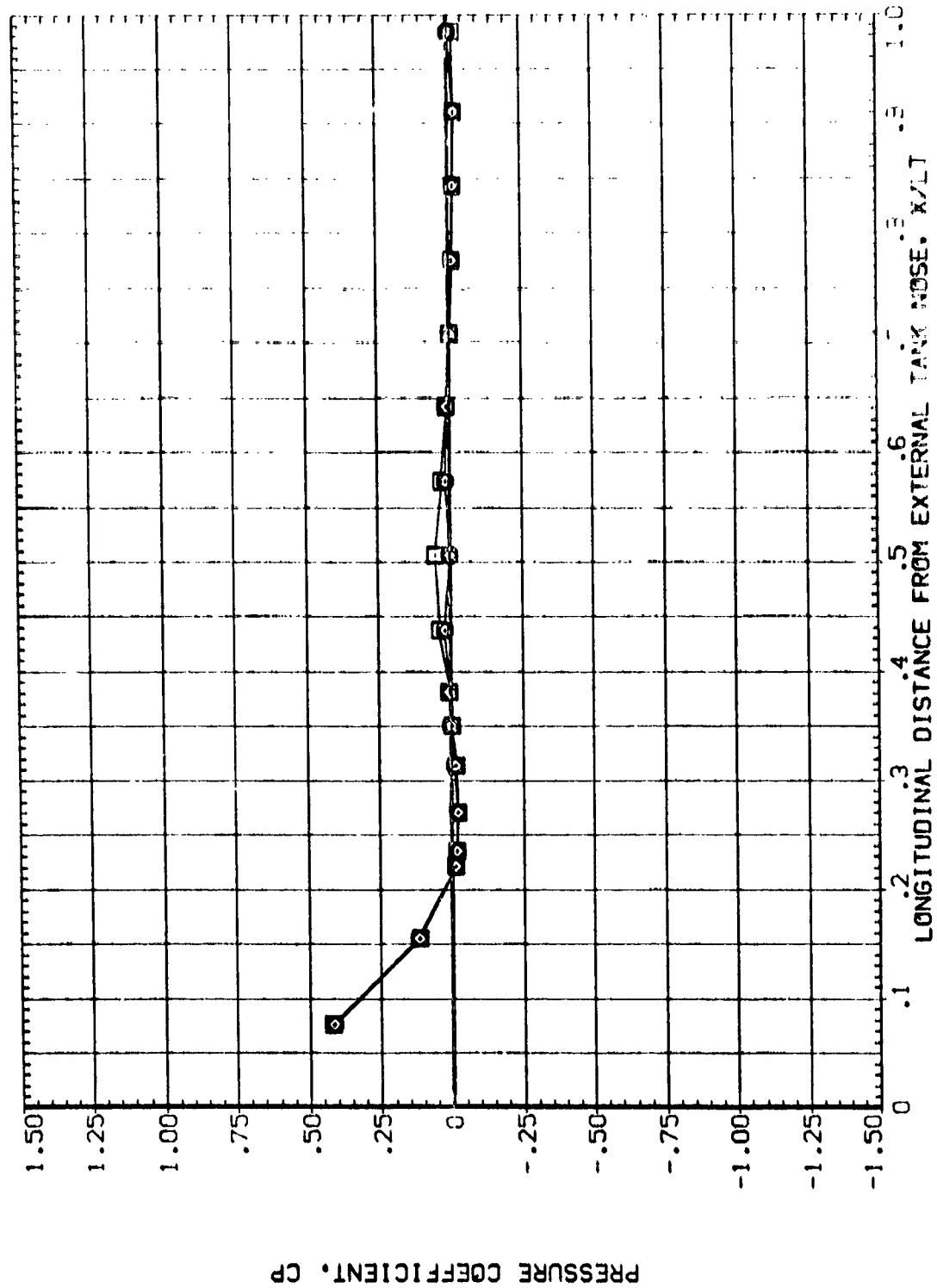
SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	PHI	BETA	MACH	ALPHA	DELTA Z	DELTA Y
□	108.000	.000	3.500	.000	.000	.000
◇	126.000	.000	3.500	.000	.000	.000
	144.000	.000	3.500	.000	.000	.000



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A8206)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRD	ZMRD	ALPHA	CONFIS	CONFIS
○	162.000	.000	3.500	6.198	5.313	5.313	.000	.000	.000	.000	.000
□	180.000			2.549					.140	.000	.000
◇	198.000								X-S98	.000	.500



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A92T05)

SYMBOL  
 ○  
 □  
 ◇

PHI  
 216.000  
 234.000  
 252.000

BETA  
 .000  
 MACH  
 3.500

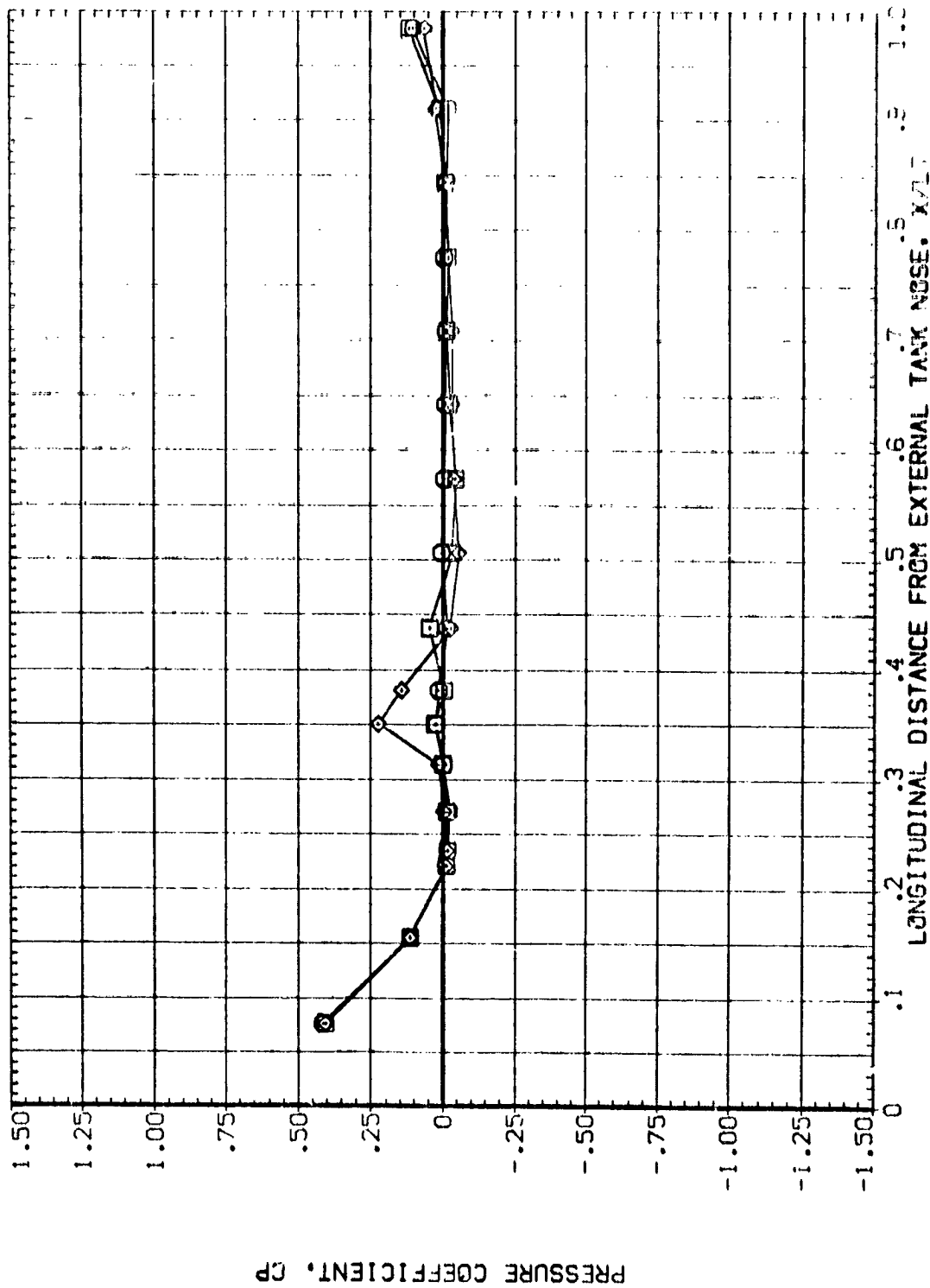
REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SQS

PARAMETRIC VALUES  
 .000  
 .000  
 .000  
 .000  
 .000

90.000  
 .000  
 .500



LONGITUDINAL DISTANCE FROM EXTERNAL TANK NOSE, X/LT

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A627080)

SYMBOL

PHI 270.000  
288.000  
306.000

BETA .000 MACH 3.500

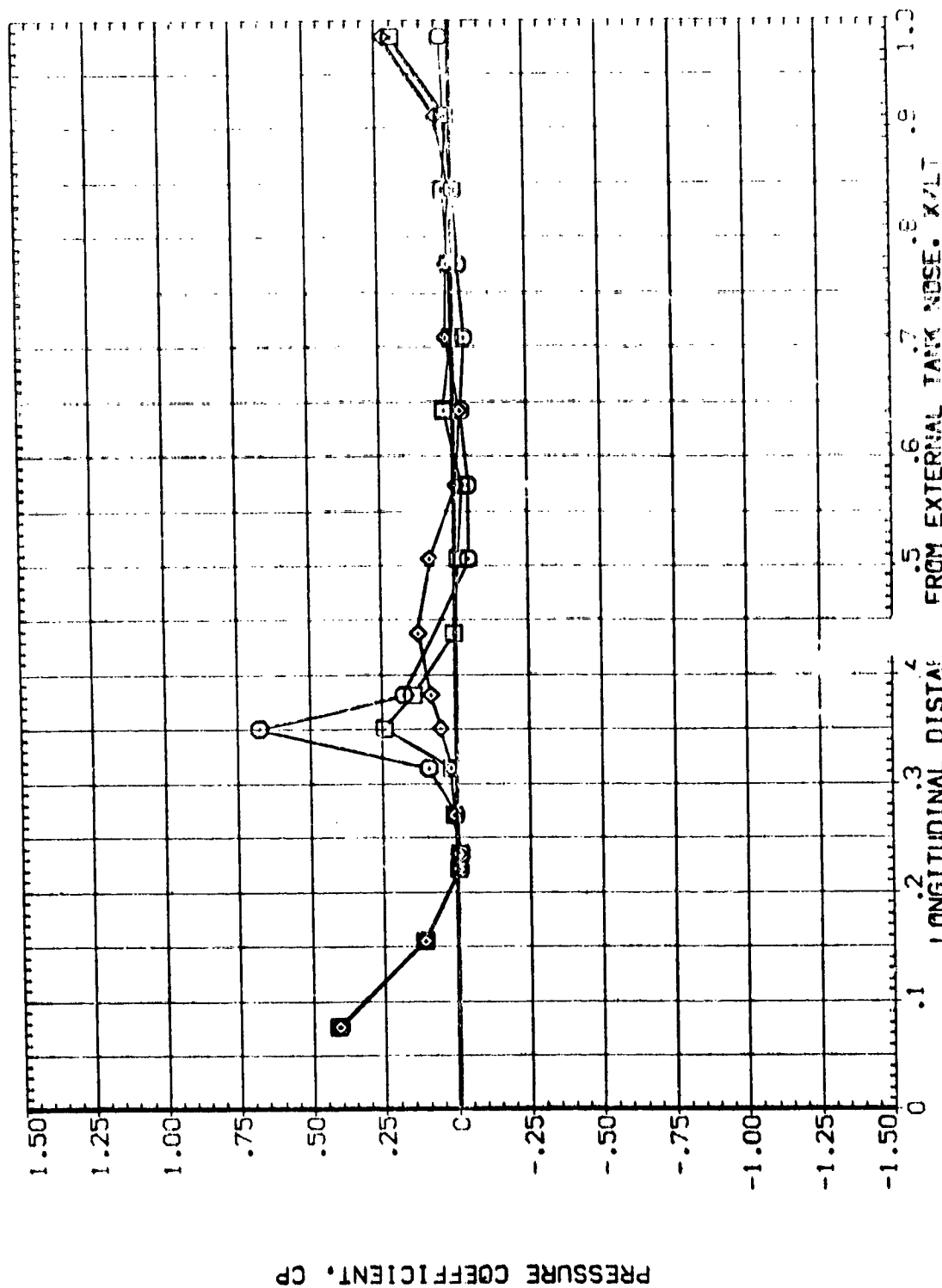
REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XREF 2.549  
YREF .003  
ZREF .000

SD IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
DELTA Y

PARAMETRIC VALUES  
.000  
.000  
.000  
.000  
.000

90.000  
100  
1500

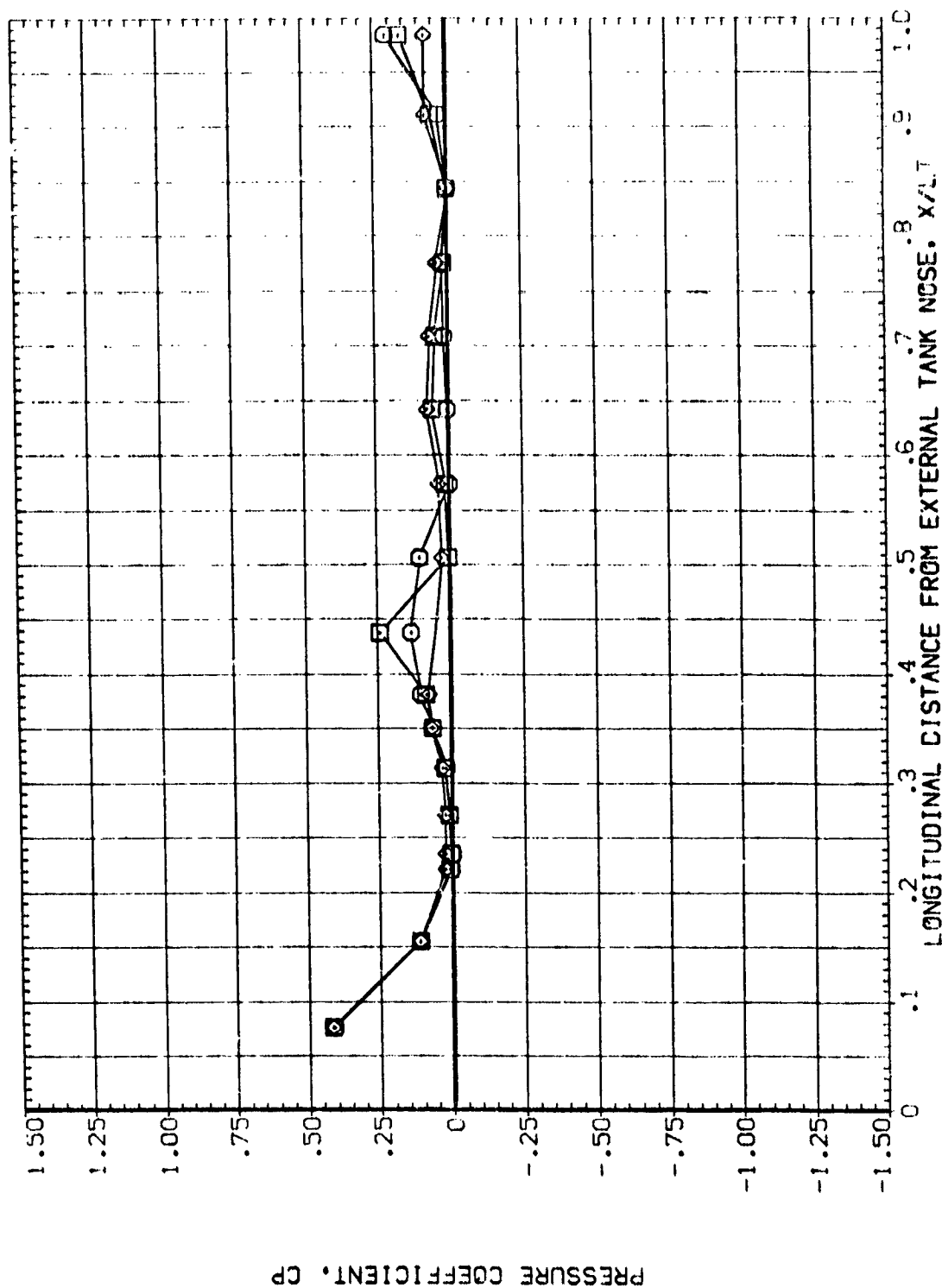


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

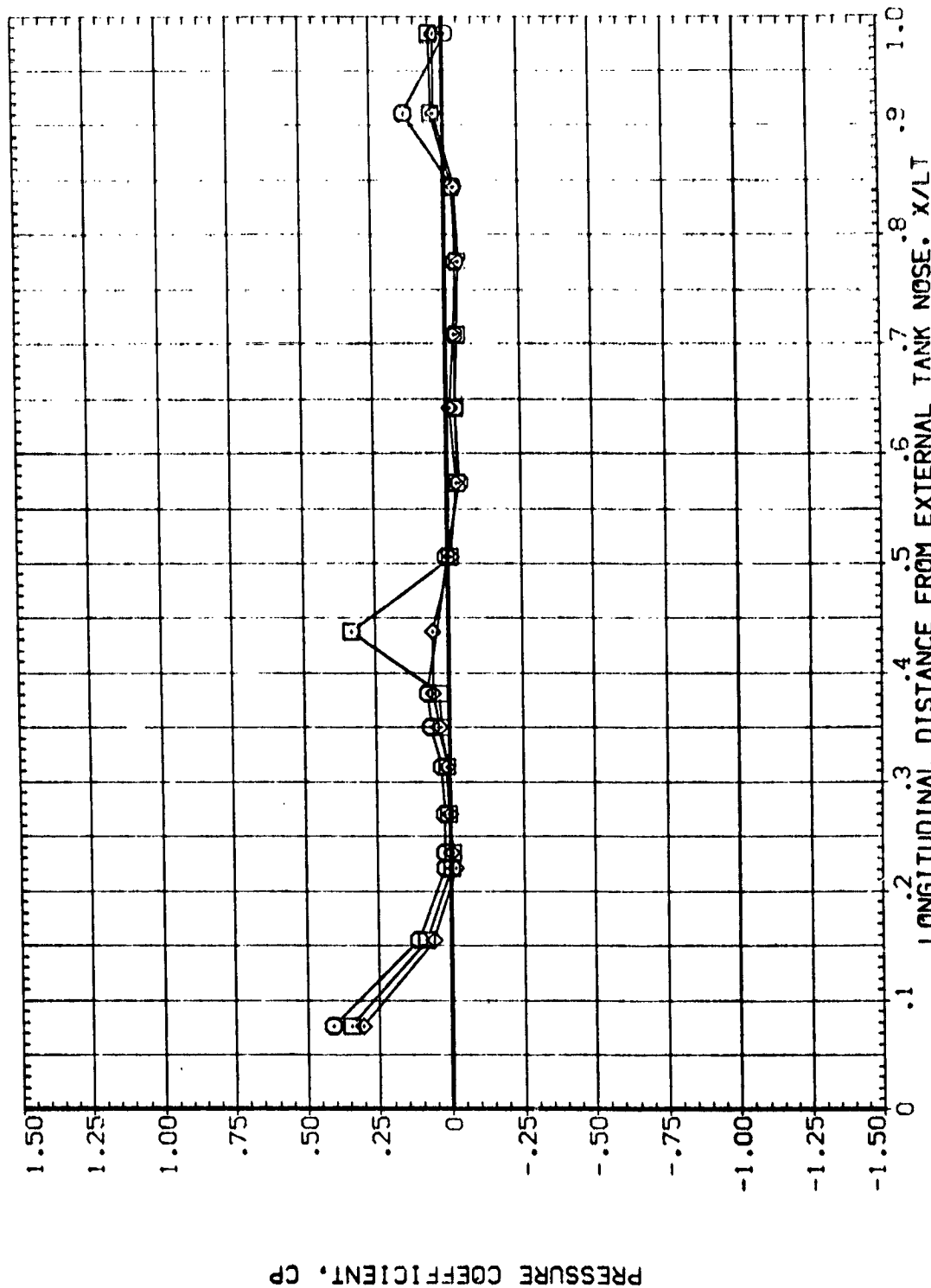
SYMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
□	324.000	.000	3.500	SREF 6.198	.000
□	342.000			LREF 5.313	.000
□	360.000			BREF 5.313	.000
				XMRP 2.545	.500
				YMRP -.000	
				ZMRP .000	
				SC.IN. 6.198	
				IN. 5.313	
				IN. 5.313	
				IN. 2.545	
				IN. -.000	
				IN. .000	
				ALPHA	
				DELTA Z	
				X-SRB	
				CONFIS	
				BLUDDER	
				359.1%	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82706)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IG	
○	.000	8.000	3.500	6.198	IN.	.000	50.000
□	18.000			5.313	IN.	.140	.000
◇	36.000			5.313	IN.	.000	.500
				2.549	IN.	.000	
				.000	IN.		
				ZMRP			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

SYMBOL

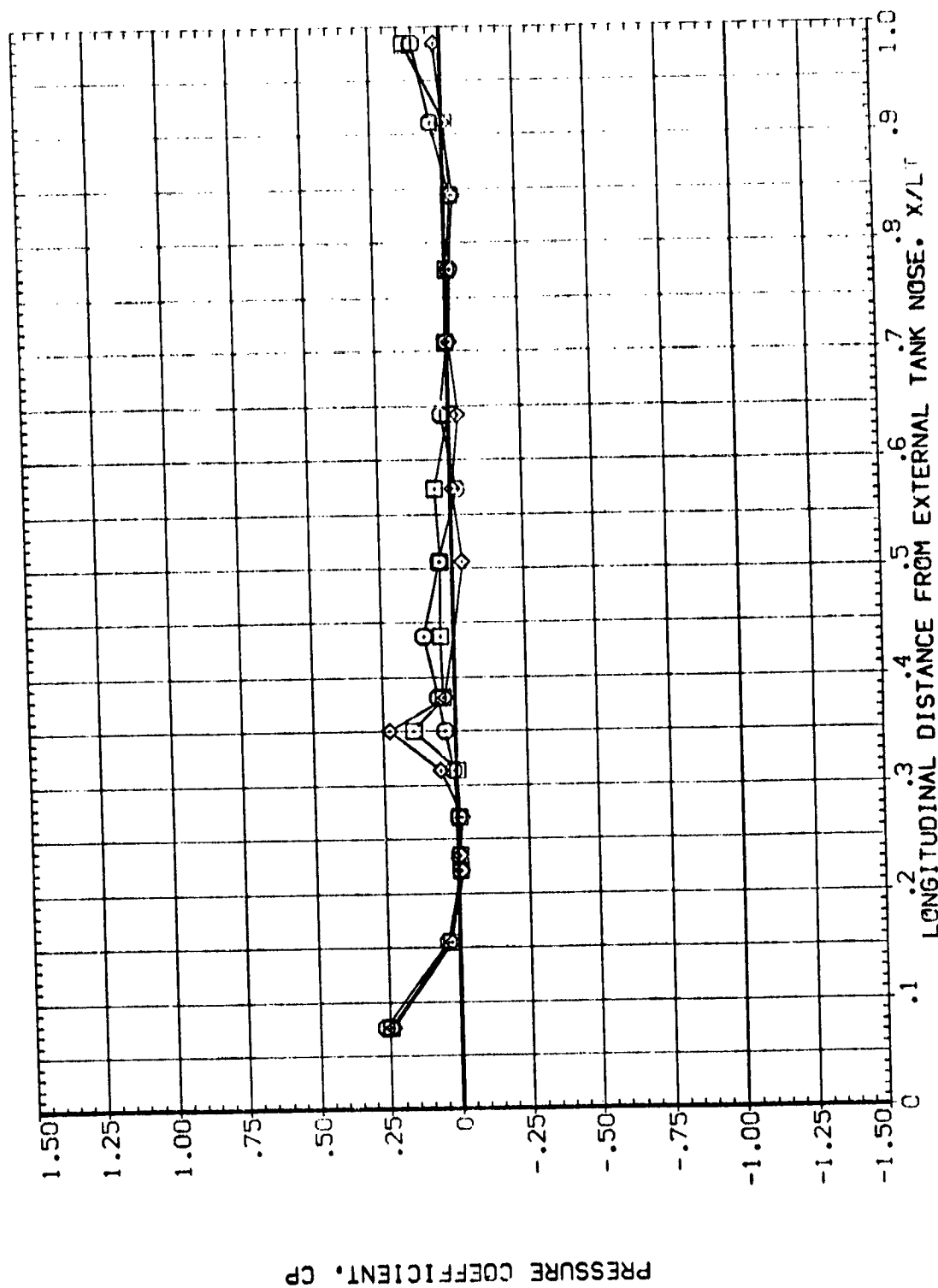
PHI	BETA	MACH
54.000	8.000	3.500
72.000		
90.000		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

**gzzzzzzz**

ALPHA  
DELTA Z  
X-SRB

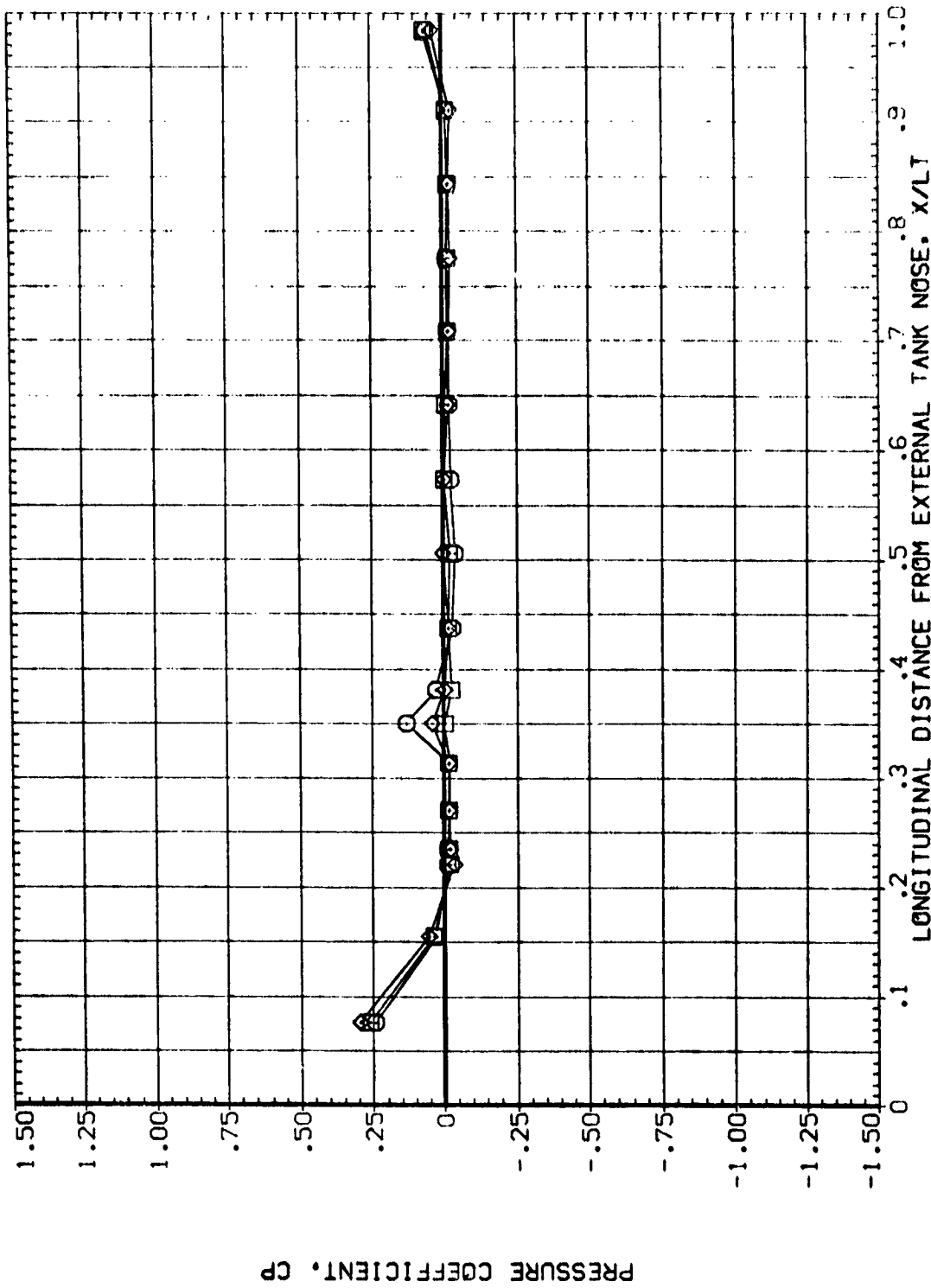
PARAMETRIC VALUES	
.000	CDFF16
.140	RUMER
.000	OSG1NC
90.000	
.000	
.500	



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SIMBOL	PHI	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	108.000	8.000	3.500	SREF 6.198	CONF 15 50.000
□	126.000			LREF 5.313	DELTA Z .000
◇	144.000			BREF 5.313	RUDER .000
				XMRP 2.549	YMRP .000
				YMRP .000	ZMRP .500



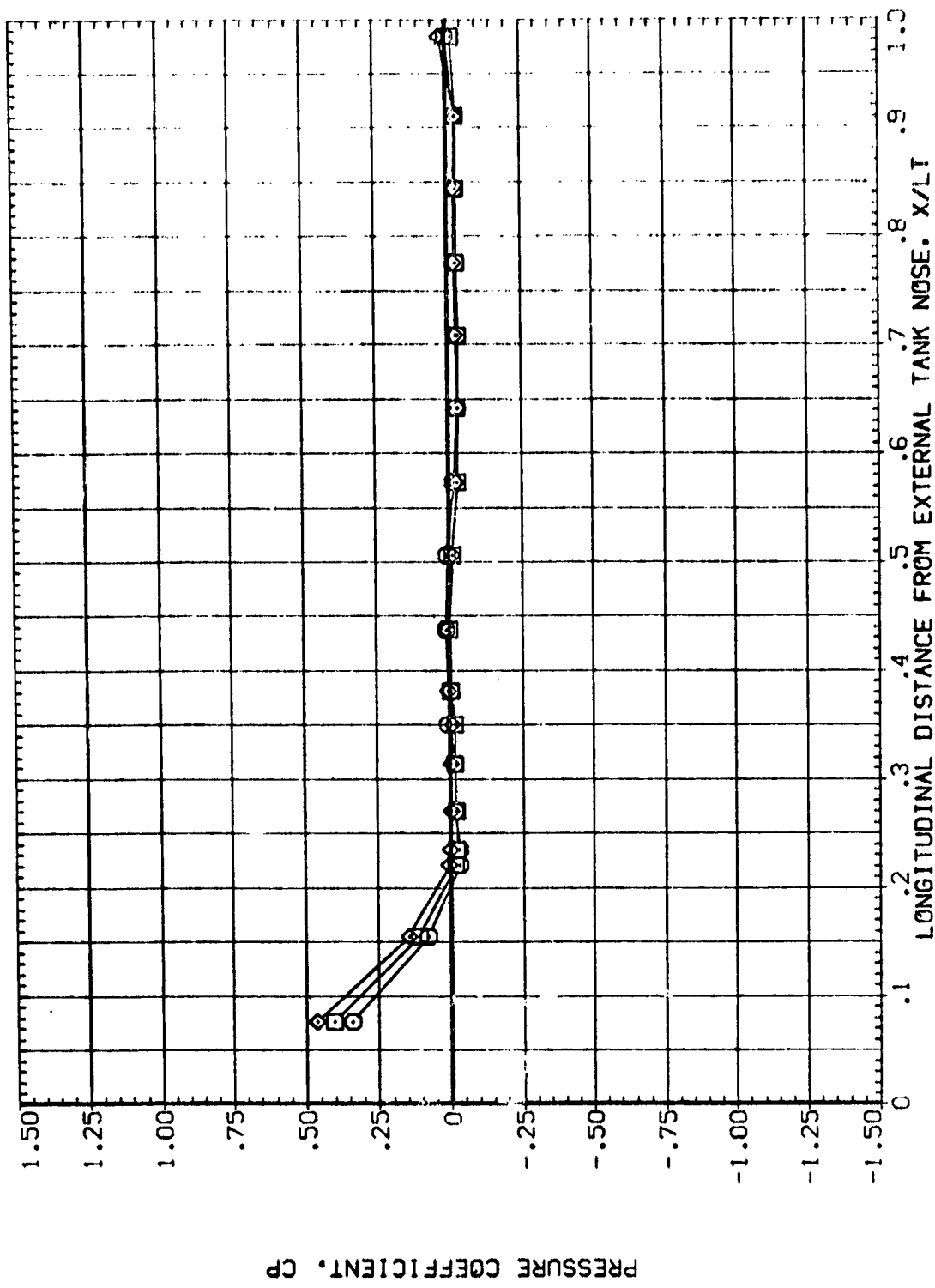
PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				CREF	LREF	BREF	XMRP	SO. IN.	IN.	IN.	IN.
○	162.000	8.000	3.500	6.198	5.313	5.313	2.549	0.000	0.000	0.000	0.000
□	180.000										
◇	198.000										

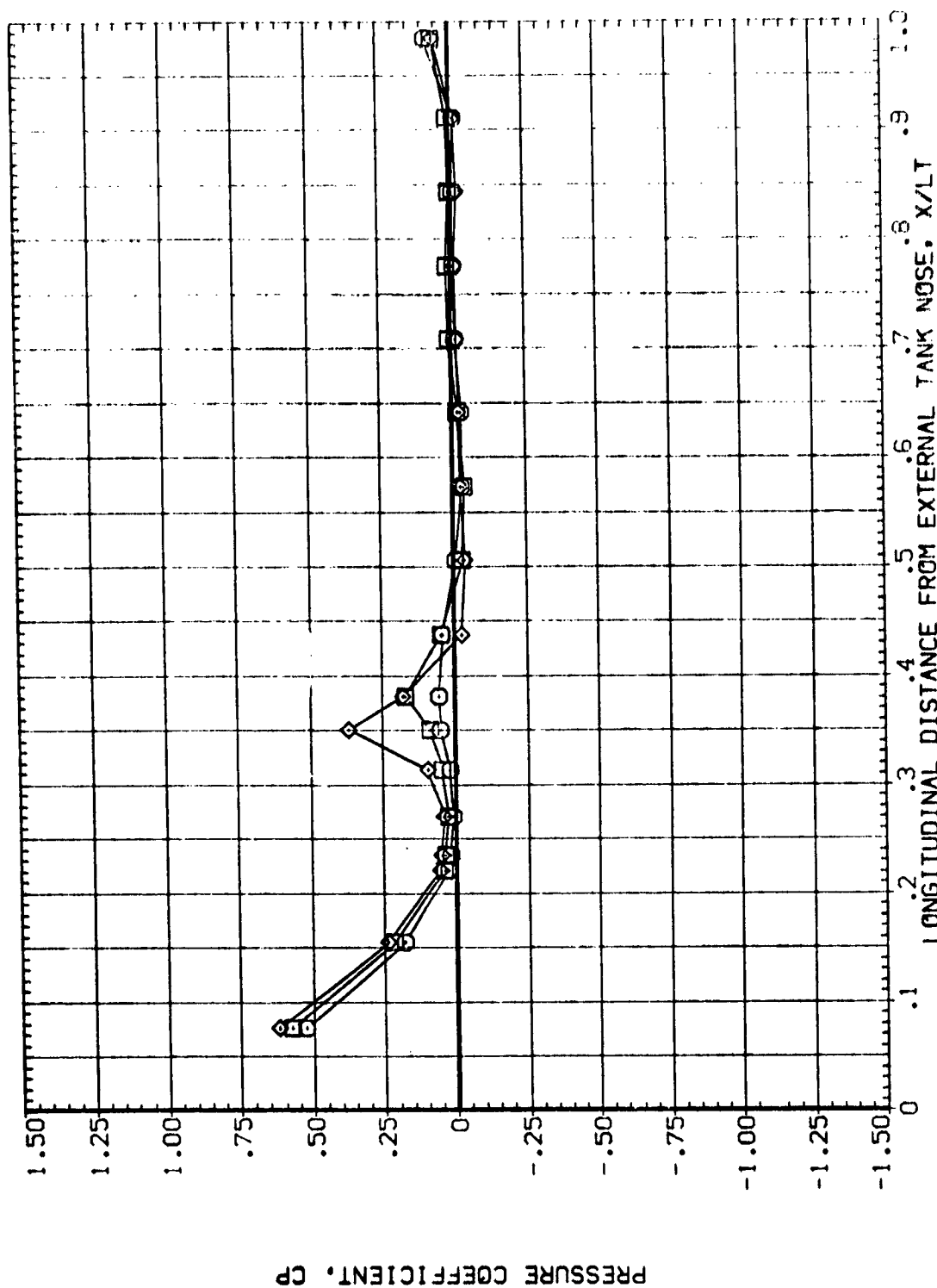
PARAMETRIC VALUES			
CONFIG	CONFIG	CONFIG	CONFIG
DELTAZ	DELTAZ	DELTAZ	DELTAZ
X-SRB	X-SRB	X-SRB	X-SRB



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

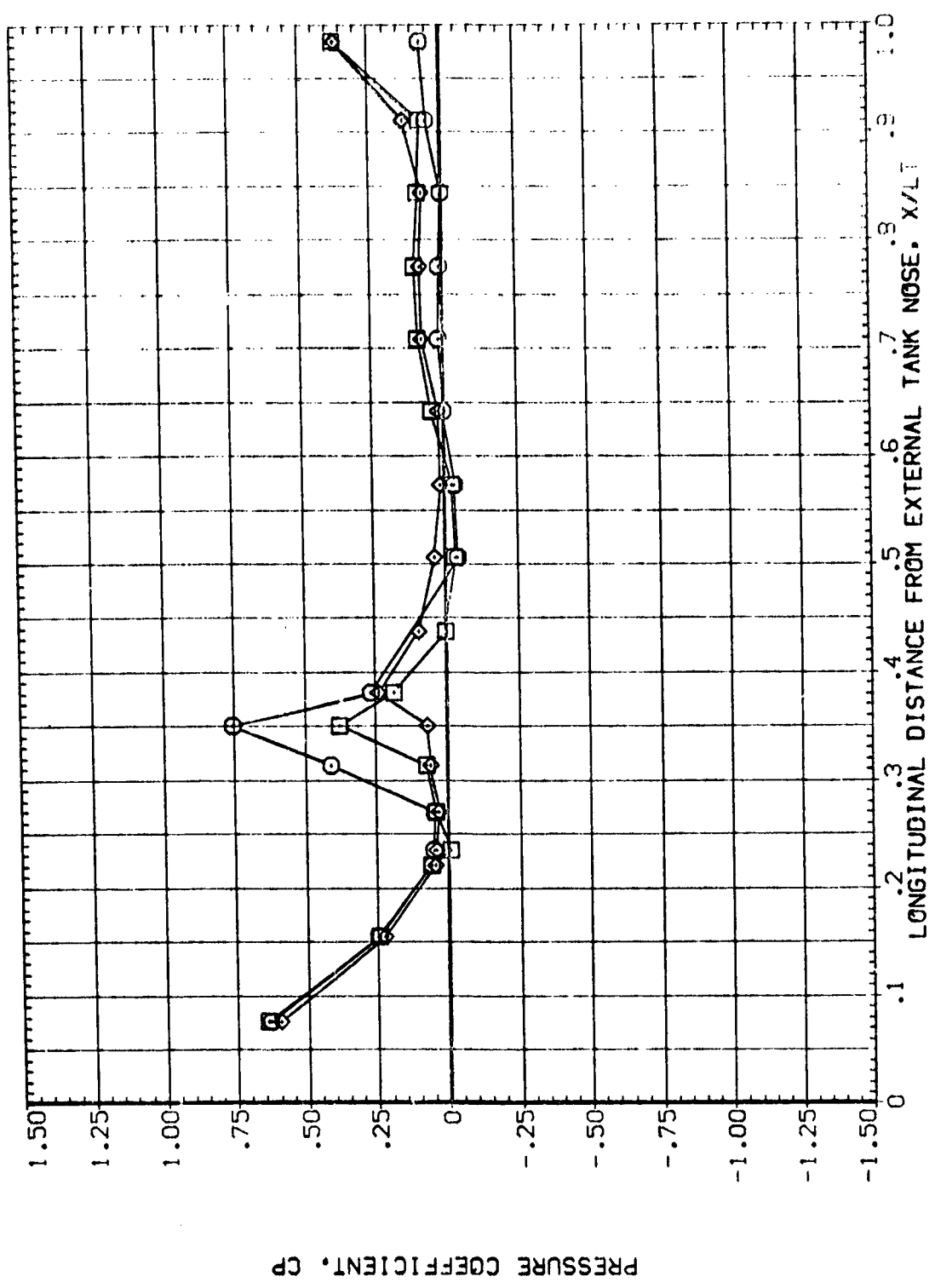
SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES				
				SREF	5.198	SO. IN.	ALPHA	CONFIS	90.000	
□	216.000	8.000	3.500	LREF	5.313	IN.	DELTA Z	.140	RUDER	.000
◇	234.000			BREF	5.313	IN.	X-SRB	.000	DRB INC	.500
	252.000			XMRP	2.549	IN.				
				YMRP	.000	IN.				
				ZMRP	.000	IN.				



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

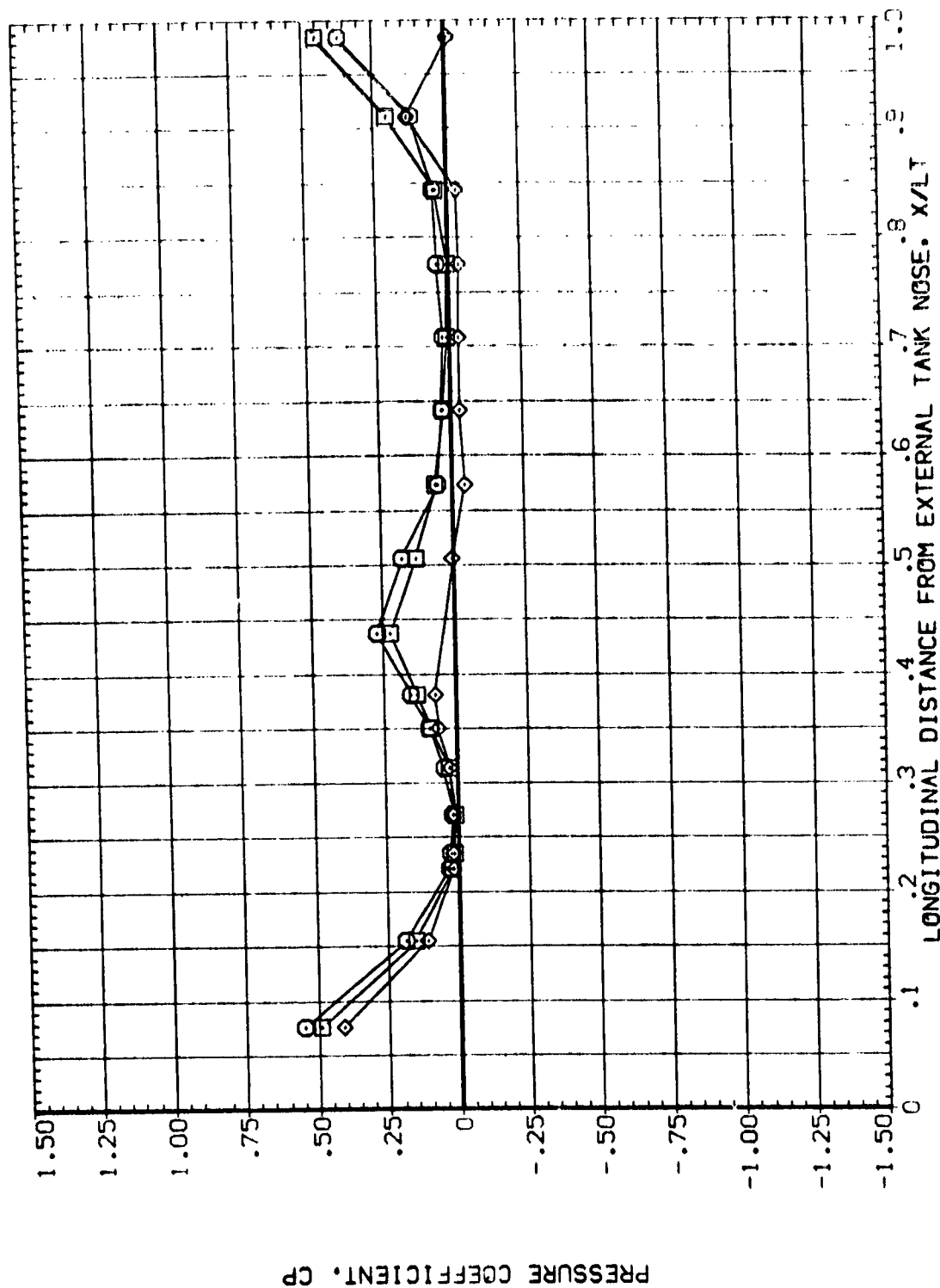
SYMBOL	PHI	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO, IN.	ALPHA	CONFIS	90.000
○	270.000	8.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	288.000							IN.	X-SRB	.140	.000
◇	306.000							IN.		.000	.500
				ZMRP				IN.			



PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82TC6)

SYMBOL	PHI	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONFIS	90.000
□	324.000	8.000	3.500	LREF	5.313	.000	.000
□	342.000			BREF	5.313	.140	.000
◇	360.000			XPRP	2.549	.000	.500
				YPRP	.000		
				ZPRP	.000		

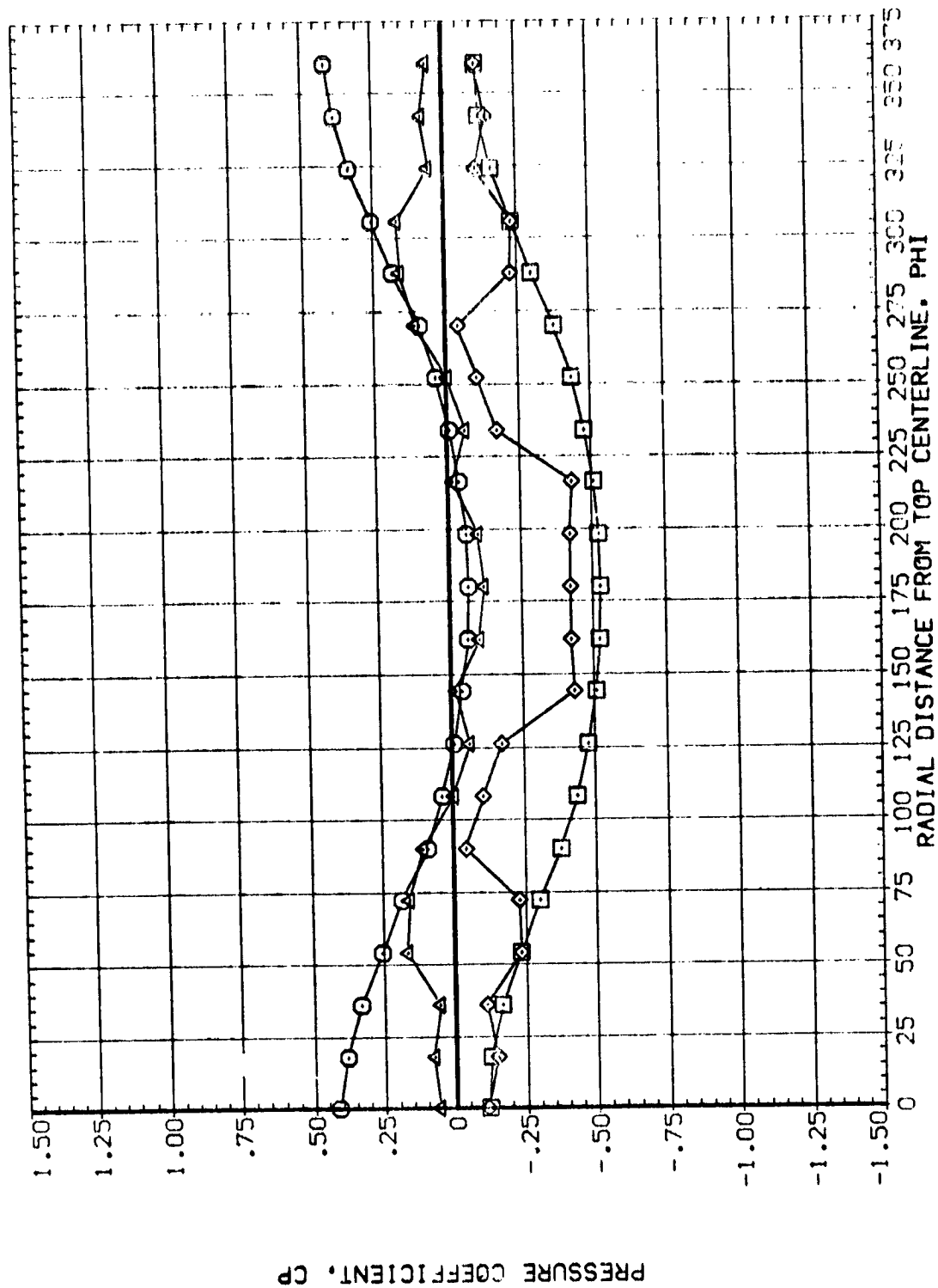


PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
◇	.076	-8.000	.900	SREF 6.198	DELTAZ	CONFIS 90.000
□	.155			LREF 5.313	X-SRB	RUDDER .000
◇	.220			BREF 5.313		SPRING .530
△	.235			XMRP .000		
				ZMRP .000		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T)

SYMBOL  
○ □ ◇ △

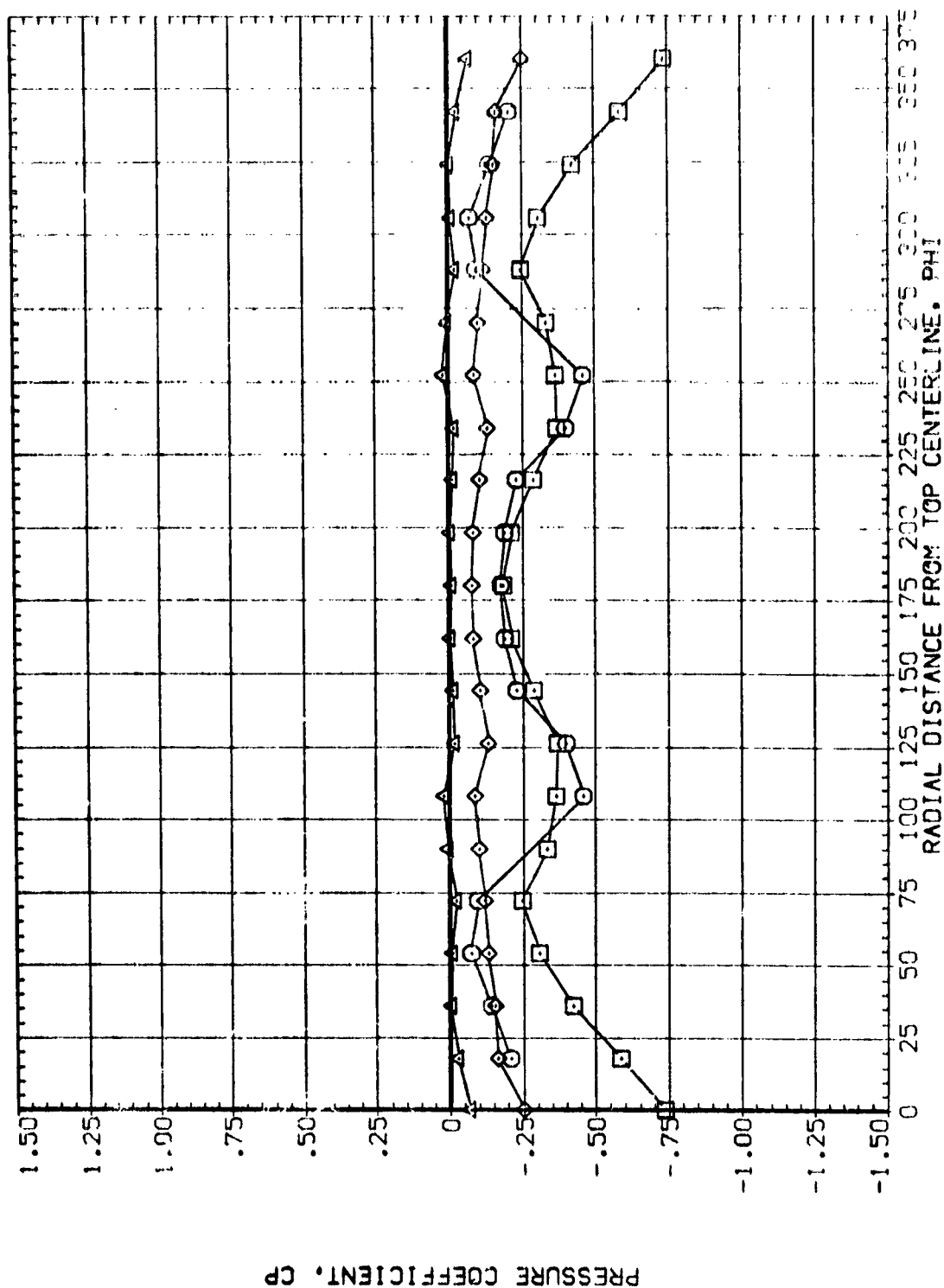
X/LT ALPHA MACH  
.438 -8.000 .900  
.506  
.573  
.641

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTAZ  
X-SRB

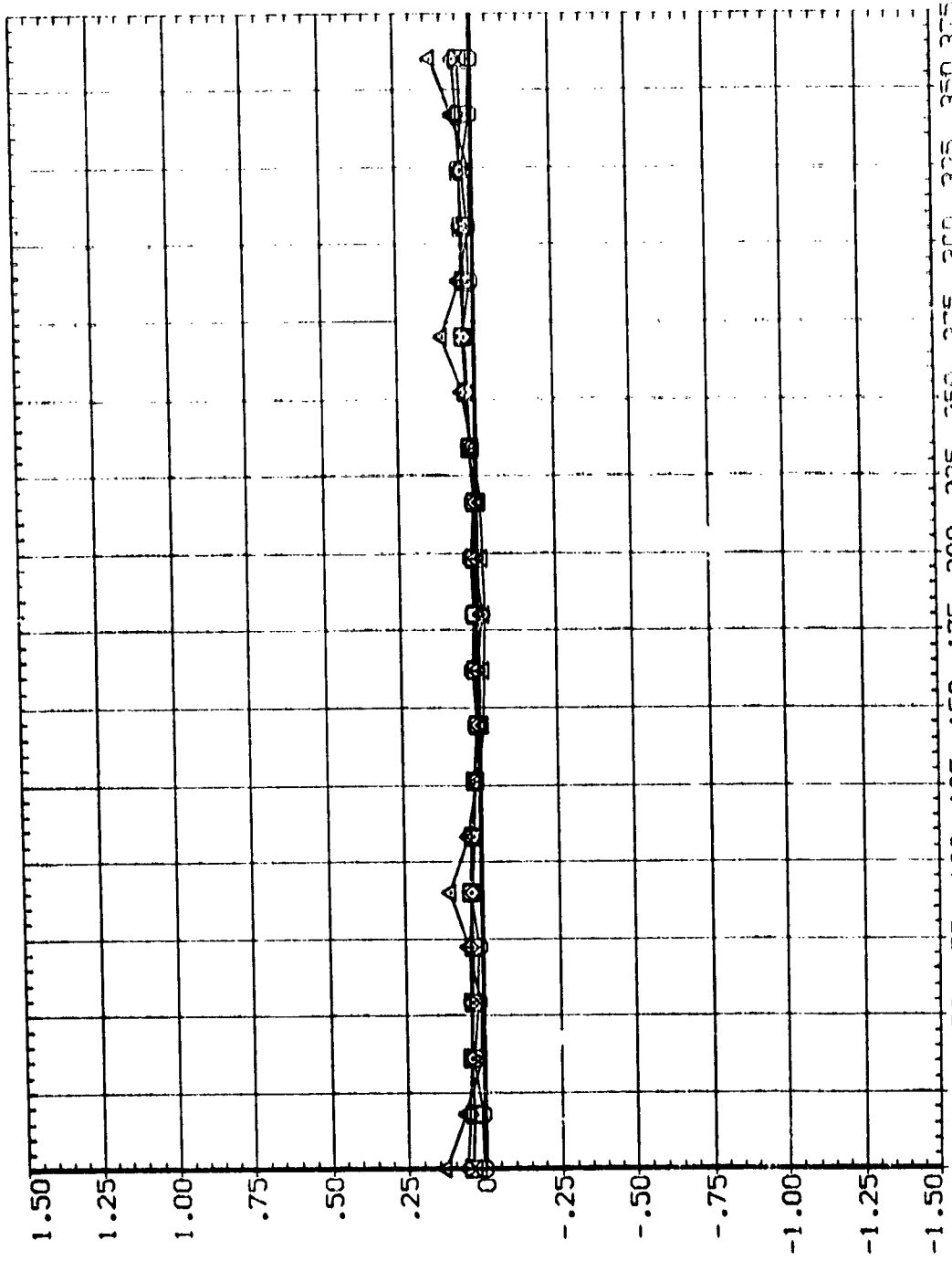
PARAMETRIC VALUES  
.000 CONFIS  
.000 RUDDER  
.000 328.1C  
.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82101)

SYMBOL			REFERENCE DATA			PARAMETRIC VALUES		
X/LT	ALPHA	MACH	SREF	6.198	50. IN.	BETA	.000	90.000
.708	-8.000	.900	UREF	5.313	IN.	DELTAZ	.140	.000
.776			BREF	5.313	IN.	K-S98	.000	.500
.844			YMRP	2.549	IN.			
.912			ZMRP	.000	IN.			



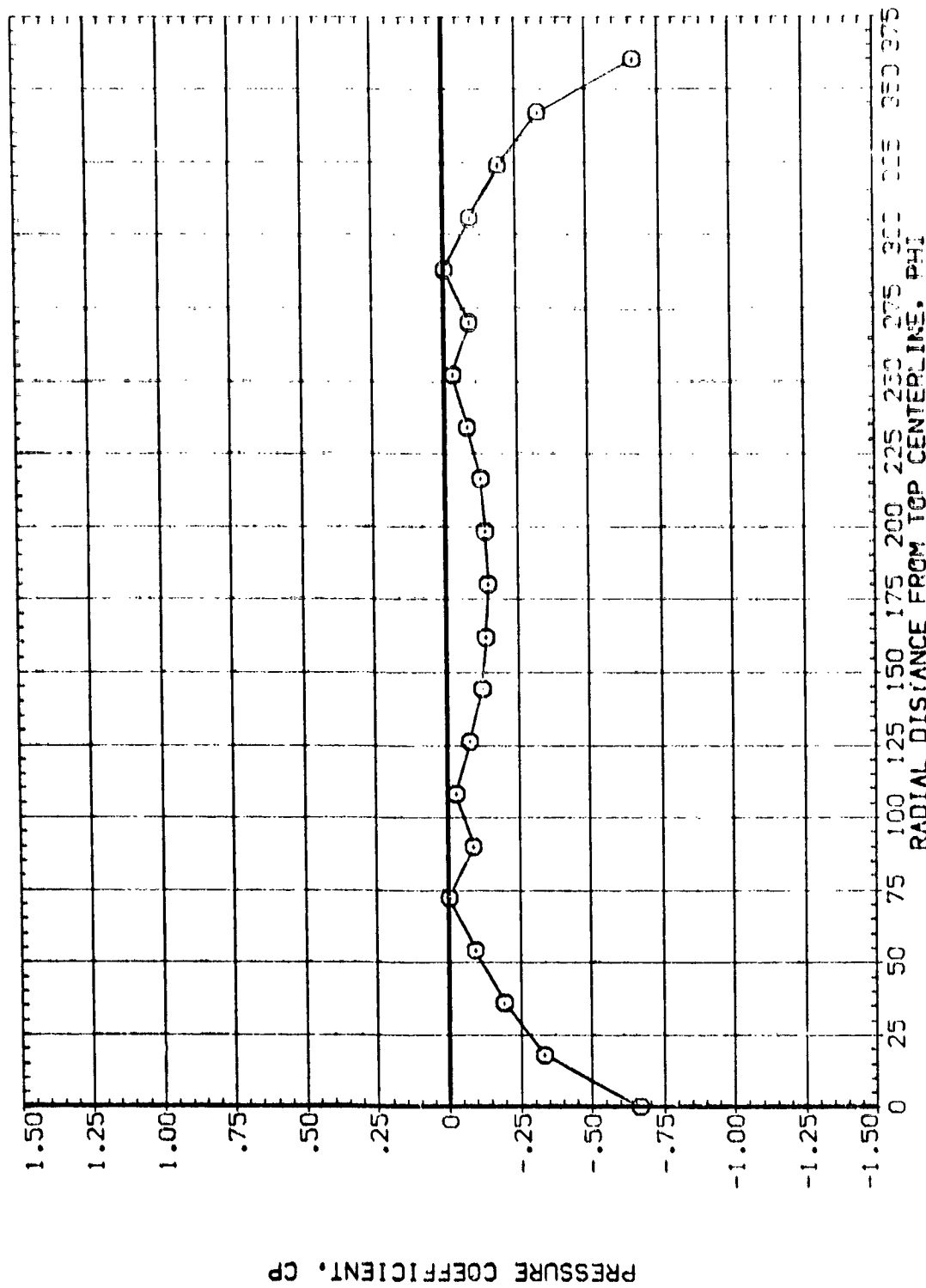
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

SYMBOL

W/LT	ALPHA	MACH
.984	-8.000	.900

REFERENCE DATA		50 IN.
SREF	6.198	IN.
LREF	5.313	IN.
BREF	5.313	IN.
XMRP	2.549	IN.
YMRP	.000	IN.
ZMRP	.000	IN.

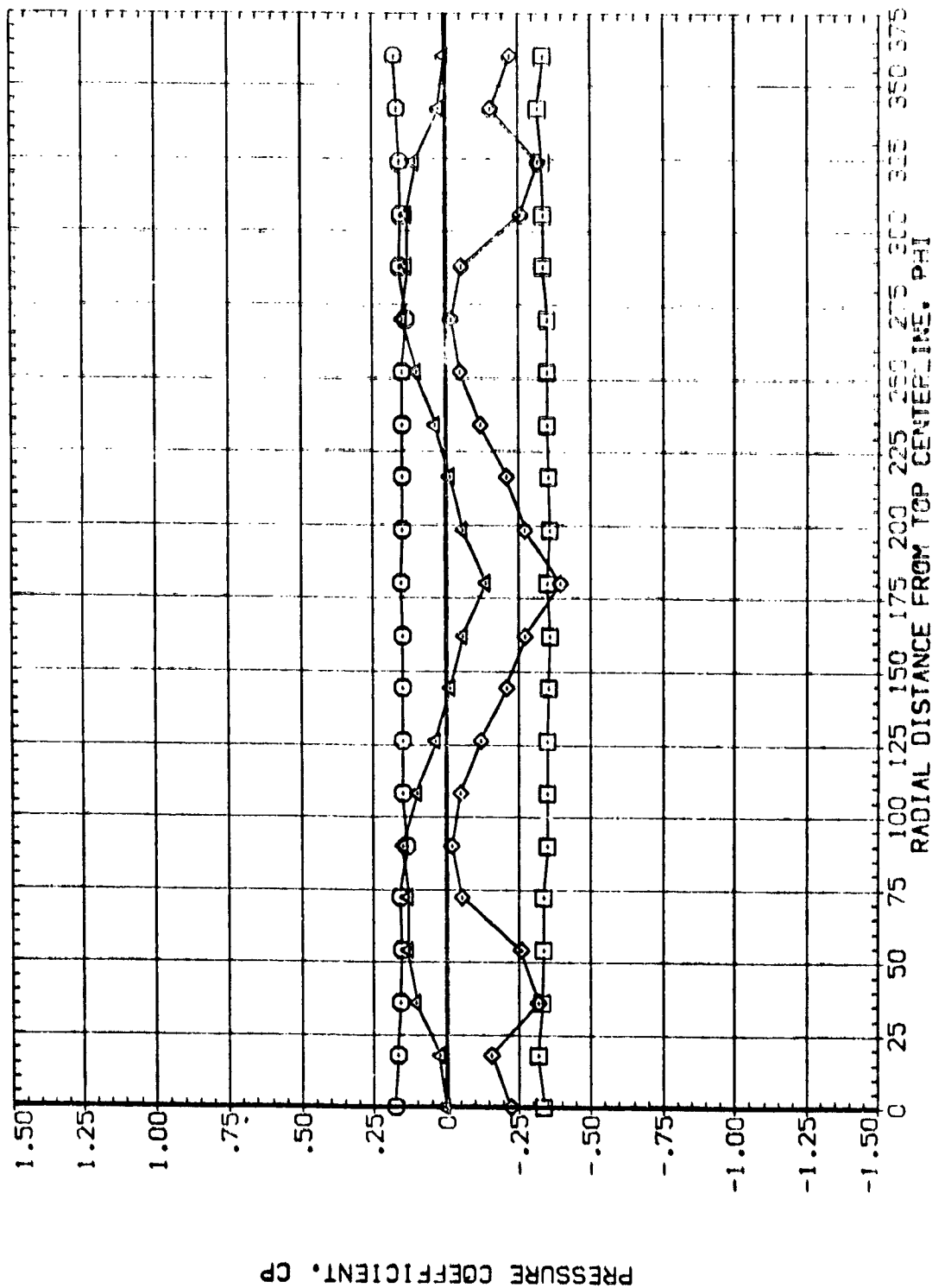
PARAMETRIC VALUES	
.000	CONFIS
.140	RUDER
.000	CONFNC
90.000	
.000	
.500	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 C3

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T010)

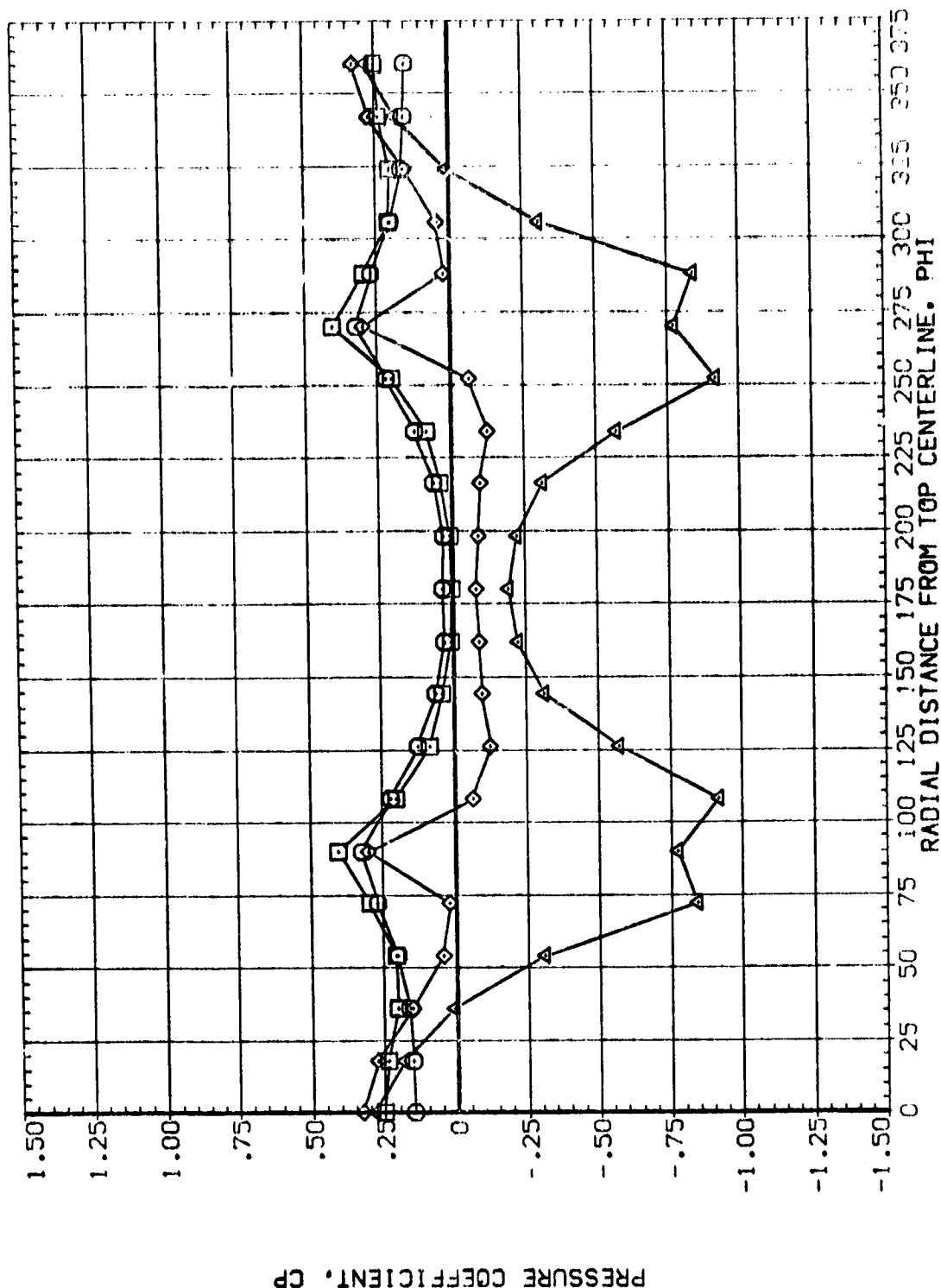
SIMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETER VALUES			
○	.076	.000	.900	SREF	6.196	BETA	.000	TSF15	90.000
□	.155			LREF	5.313	DELTAZ	.140	SLIDER	.000
◇	.220			BREF	5.313	X-S98	.000	DSB12	.500
△	.235			XREF	2.549				
				YREF	.000				
				ZREF	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
○	.271	.000	.900	SREF	6.198	BETA	.000	CONFID	90.000
□	.314			LREF	5.313	DELTAZ	.140	RUDDER	.000
◇	.360			BREF	5.313	X-SRB	.000	SSBINC	.500
△	.382			XMRP	2.549				
				YMRP	.000				
				ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03

**SYMBOL**

LT  
.438  
.506  
.573  
.641

**ALPHA**

HCN

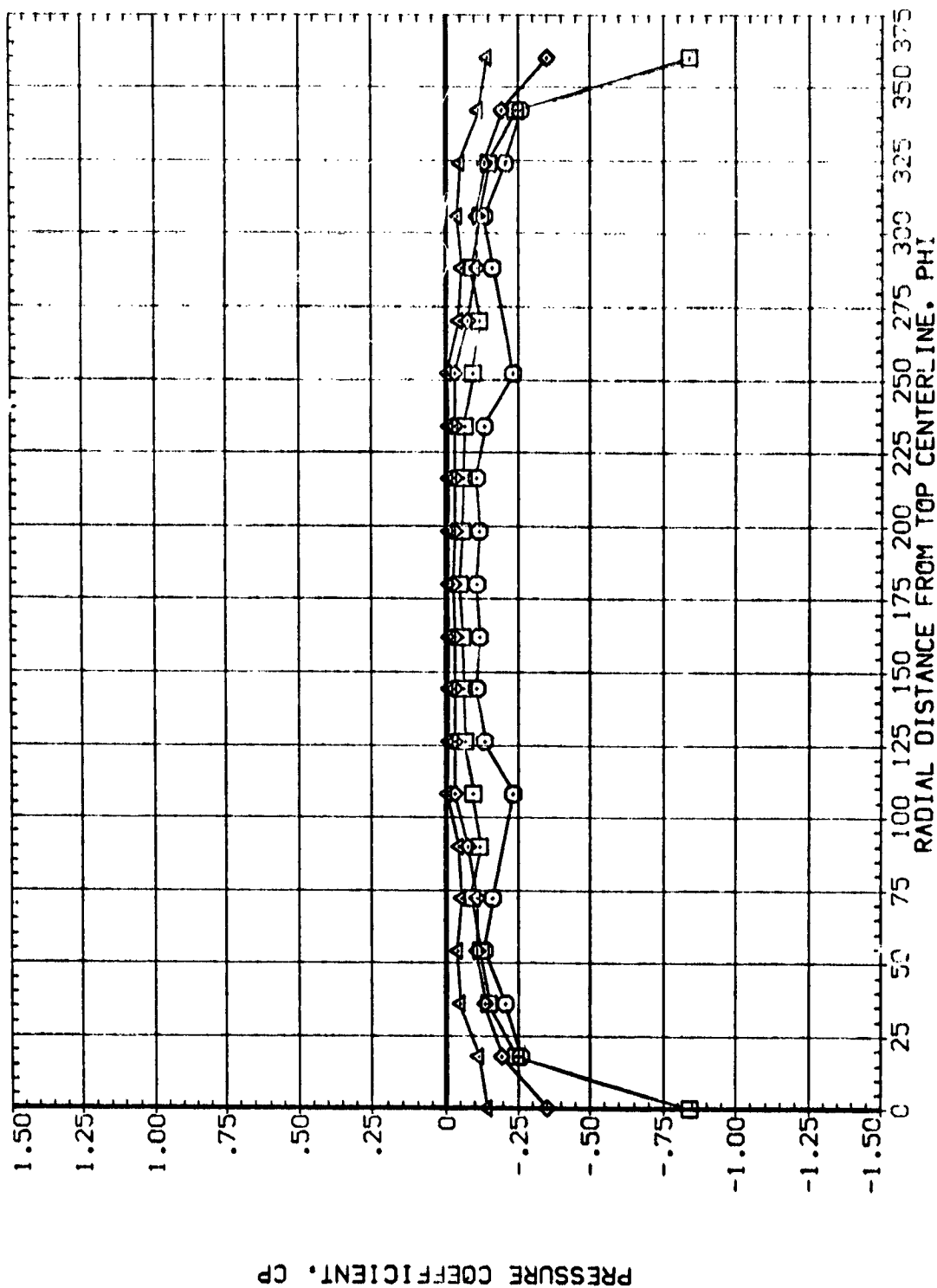
	REFERENCE DATA
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

50. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA  
X-SP8

PARAMETRIC VALUES	
.000	CONFID
.149	RUDDER
.000	ORBITAL

305.  
300.  
300.000



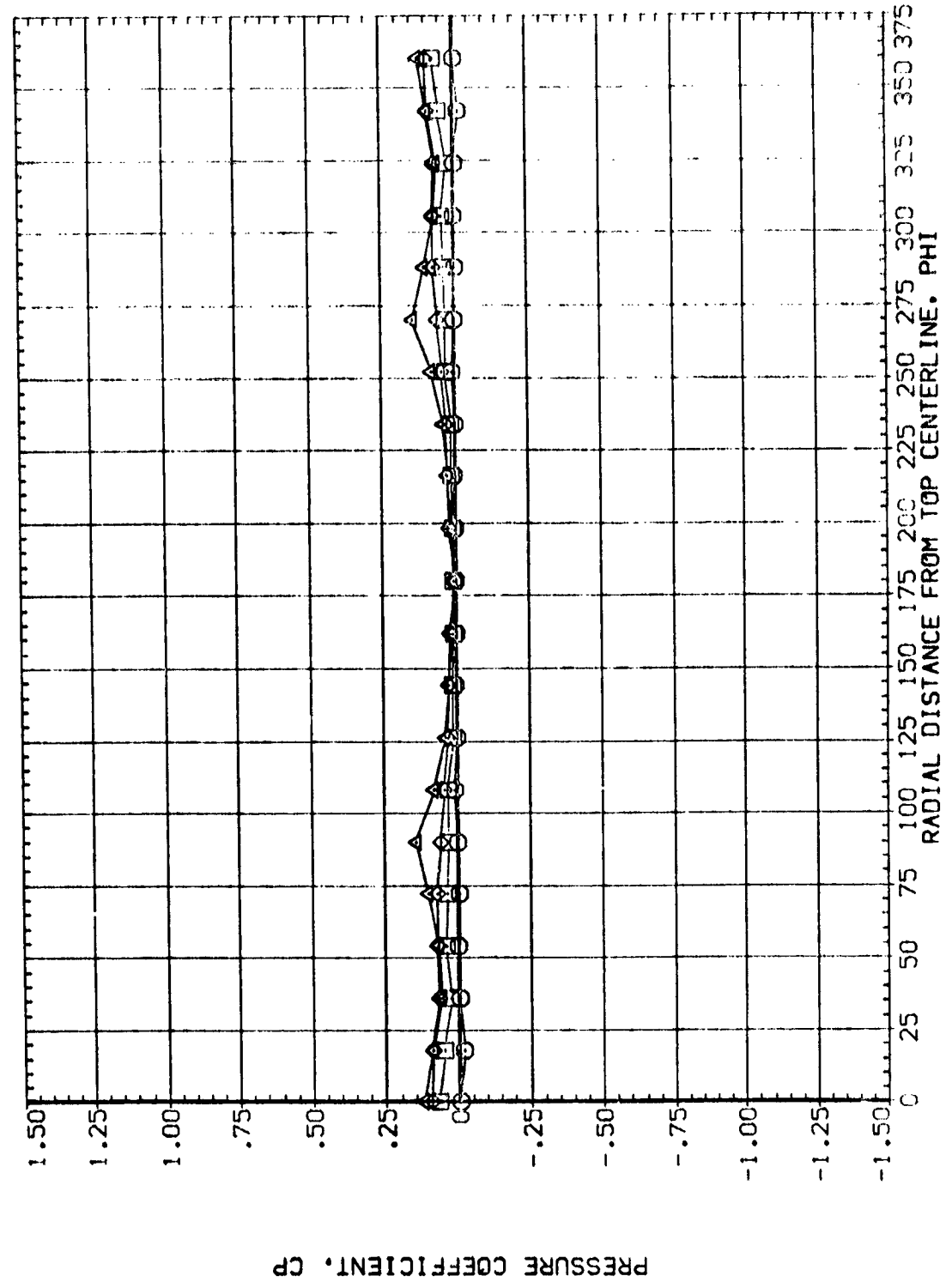
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

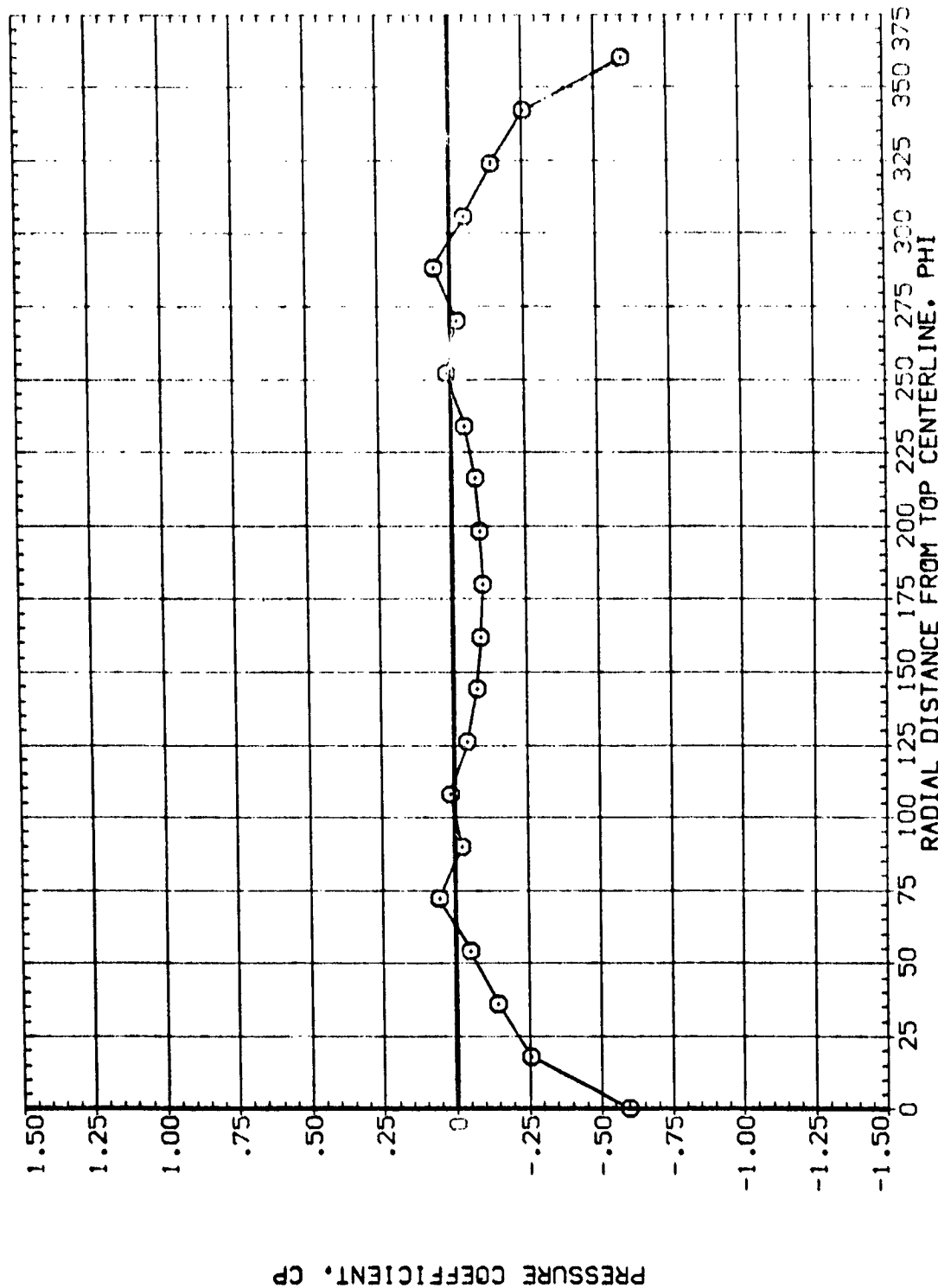
SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	X/ALT	ALPHA	MACH	BETA	CONF IS	90.000
○	.708	.000	.900	.000	CONF IS	.000
□	.776			.140	RUDDER	.000
◇	.844			.000	368.14C	.500
△	.912			X-588		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

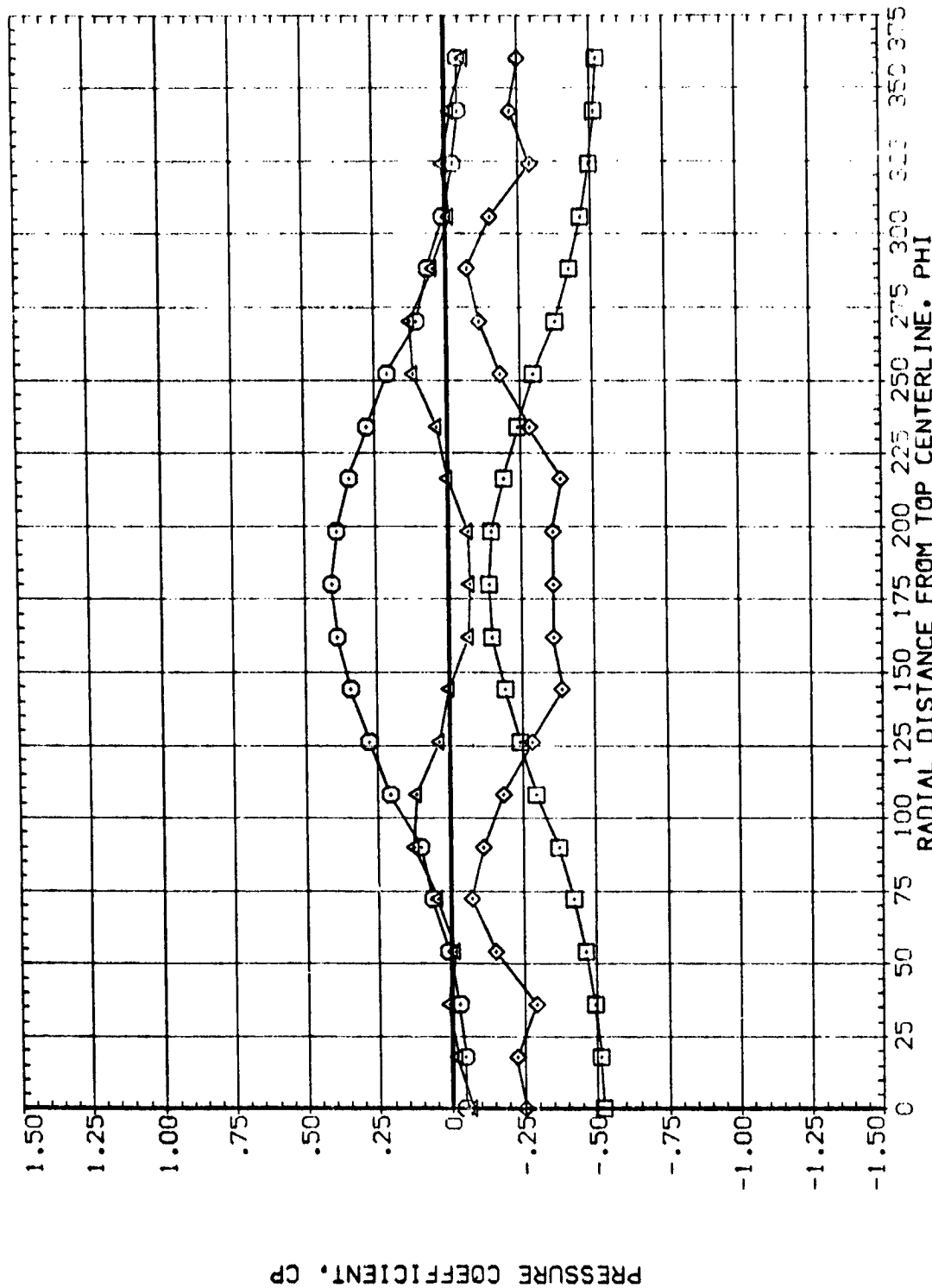
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA					PARAMETRIC VALUES				
○	.984	.000	.900	SREF	5.198	BETA	.000	CO-15	.000	90.000			
				LREF	5.313	DELTAZ	.140	RUDD	.000				
				BREF	5.313	X-SRB	.000	DB1-C	.000	.500			
				XMRP	2.549								
				YMRP	.000								
				ZMRP	.000								



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

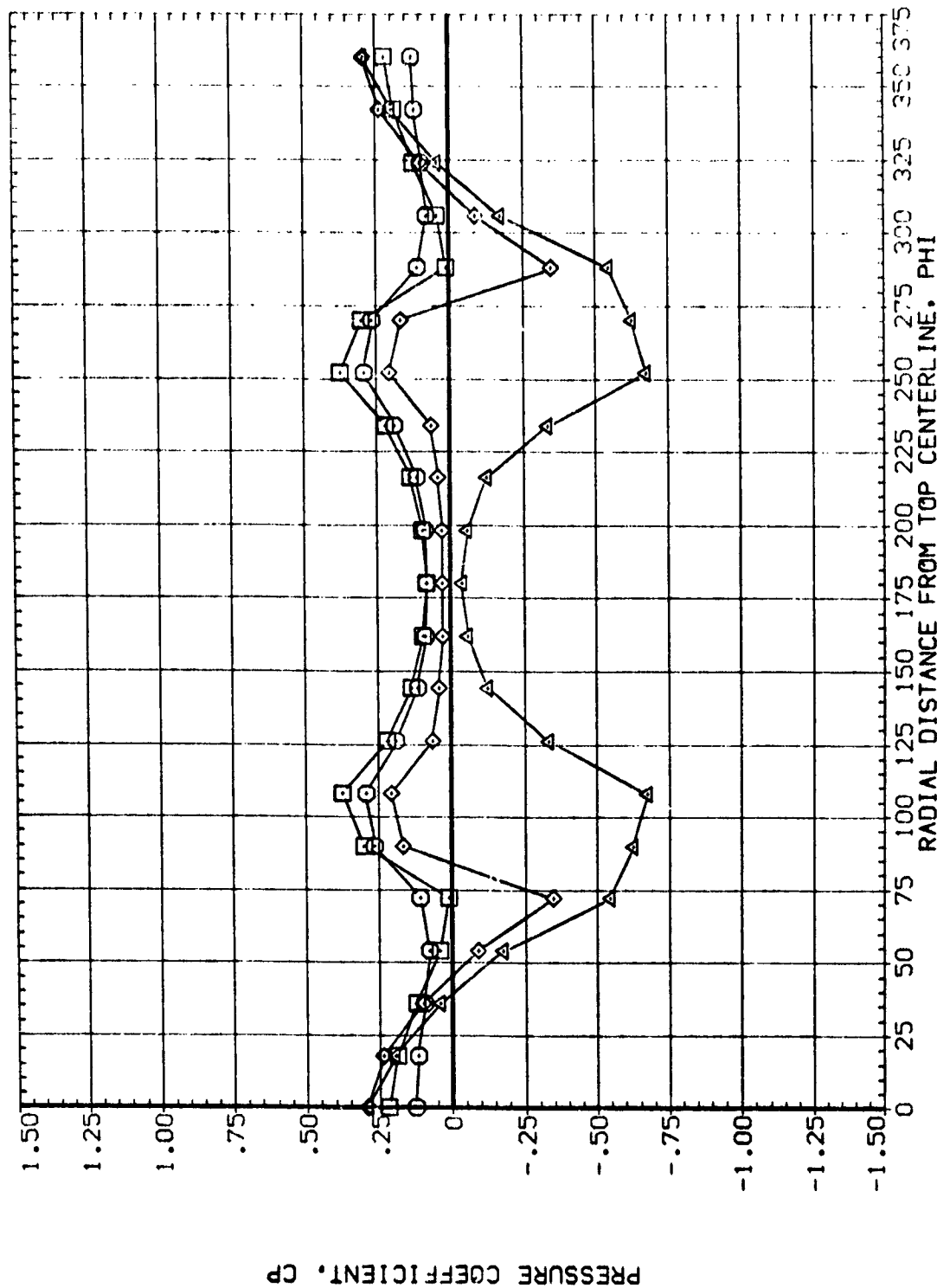
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	CONFIS	RUDDER	ORBIT INC
○	.076	8.000	.900	6.198	5.313	5.313	2.549	DELTAZ	.000	.140	.000
□	.155							Y-SRB	.000	.000	.500
◇	.220										
△	.235										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

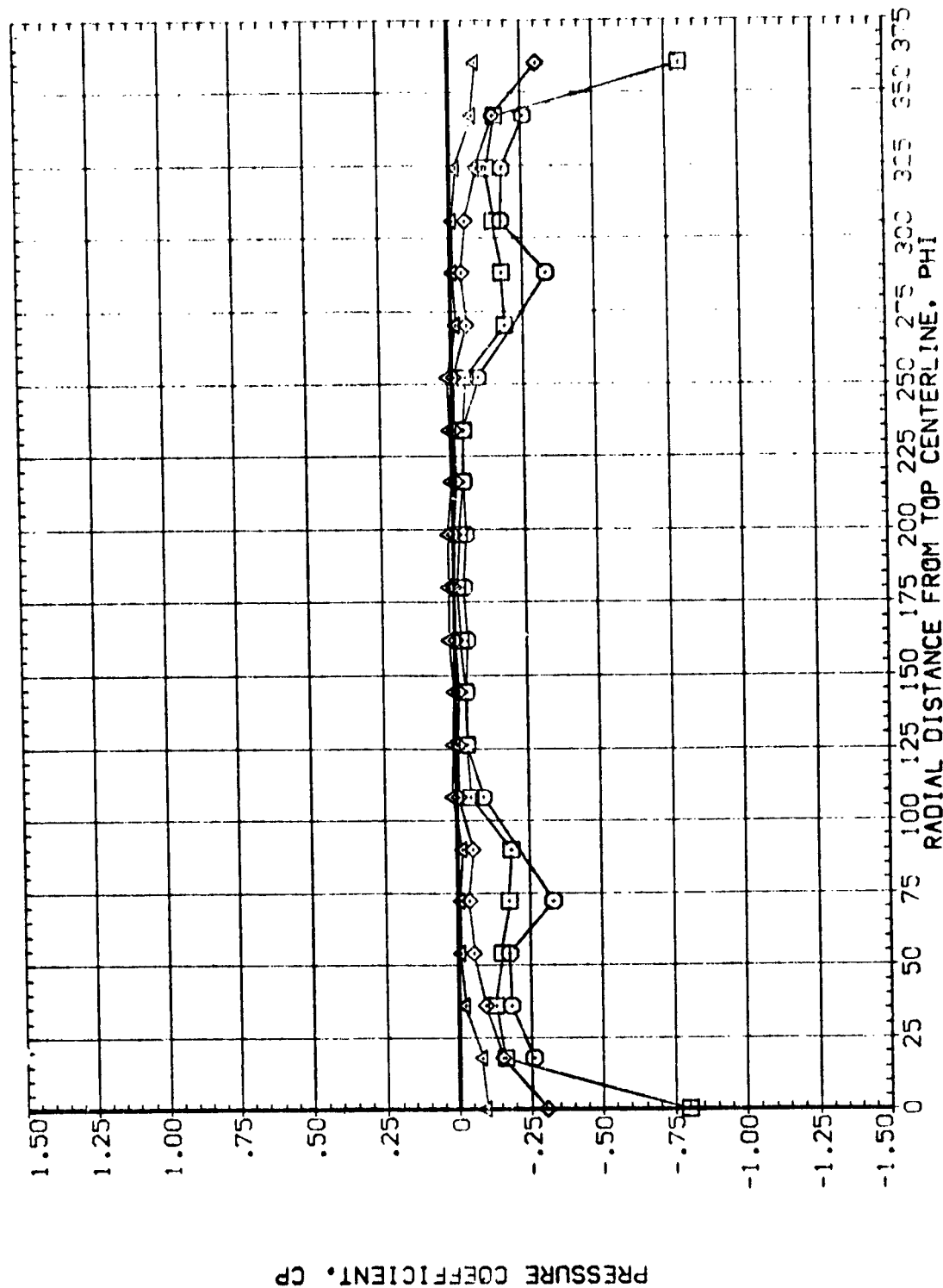
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	.271	8.000	.900	SREF 6.198	DELTAZ	CONF IS 90.000
□	.314			LREF 5.313	X-SRB	RUDER .000
◇	.350			BREF 5.313		ORBITAL .500
△	.382			YMRP 2.549		
				ZMRP .000		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

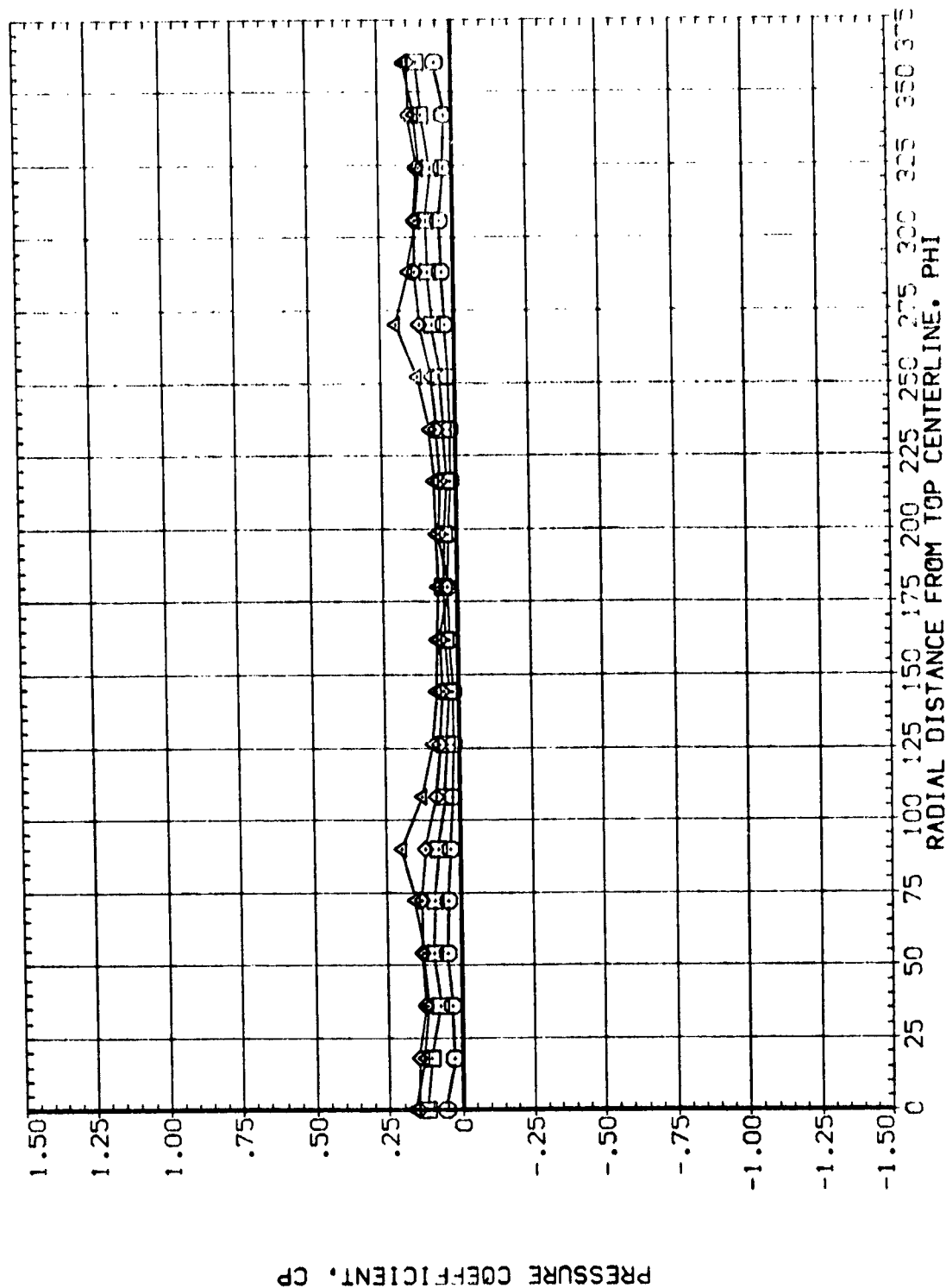
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
□	.438	8.000	.900	SREF	6.198	BETA	.000	CONFIS	90.000
□	.506			LREF	5.313	DELTA Z	.000	FLUDDER	.000
◇	.573			BREF	5.313	X-SRB	.000	ORRINC	.500
△	.641			XMRP	2.549				
				YMRP	.000				
				ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	ZMRP	SO. IN.	BETA	CONFIS
○	.708	8.000	.900	6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	CONFIS
□	.776								IN.	X-SRB	RUDER
◇	.844								IN.		CONFIS
△	.912								IN.		CONFIS



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

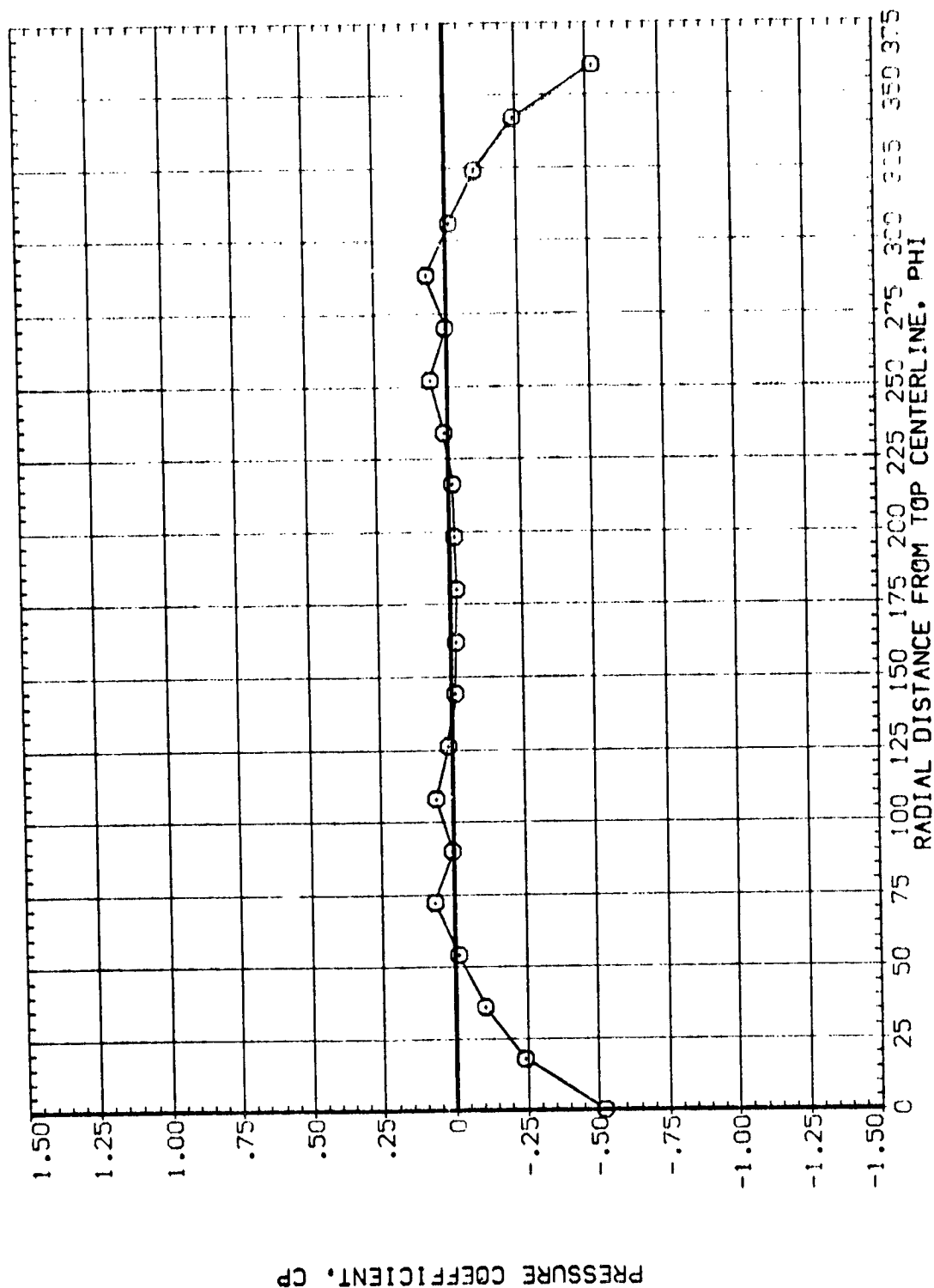
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
O

X/LT .984 ALPHA 8.000 MACH .900

REFERENCE DATA  
SREF 6.198 SQ. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

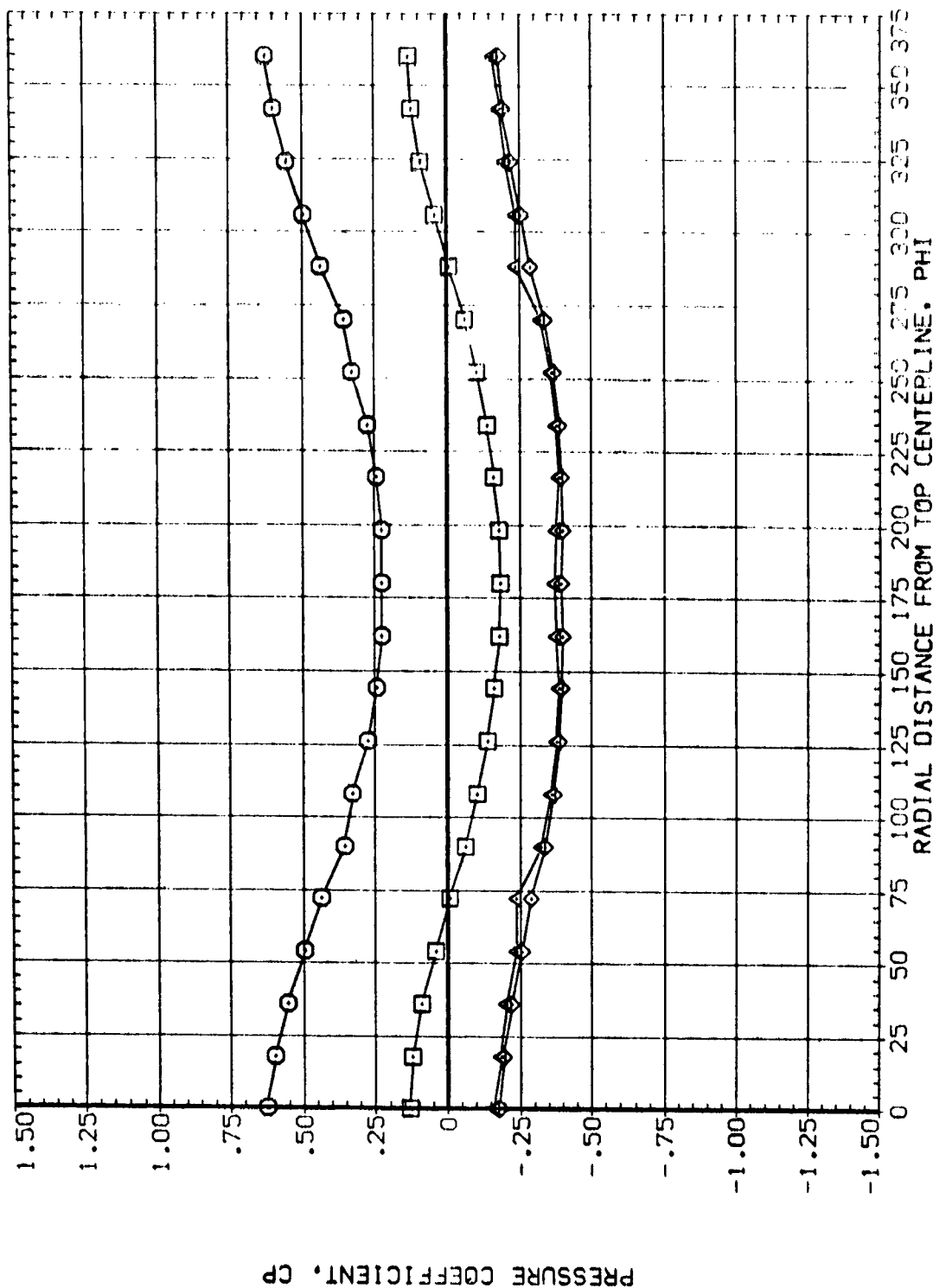
PARAMETRIC VALUES  
BETA .000 CONVTS 90.000  
DELTAZ .140 RLODER .000  
X-SRB .000 DRG-VC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82701)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	LREF	BETA	CONF IG	CONF IG	
○	.076	-8.000	1.250	5.313	5.313	DELTA Z	.140	RUEER	.000
□	.155			2.549	2.549	X-369	.000	DSBINC	.500
◇	.220								
▽	.235								



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

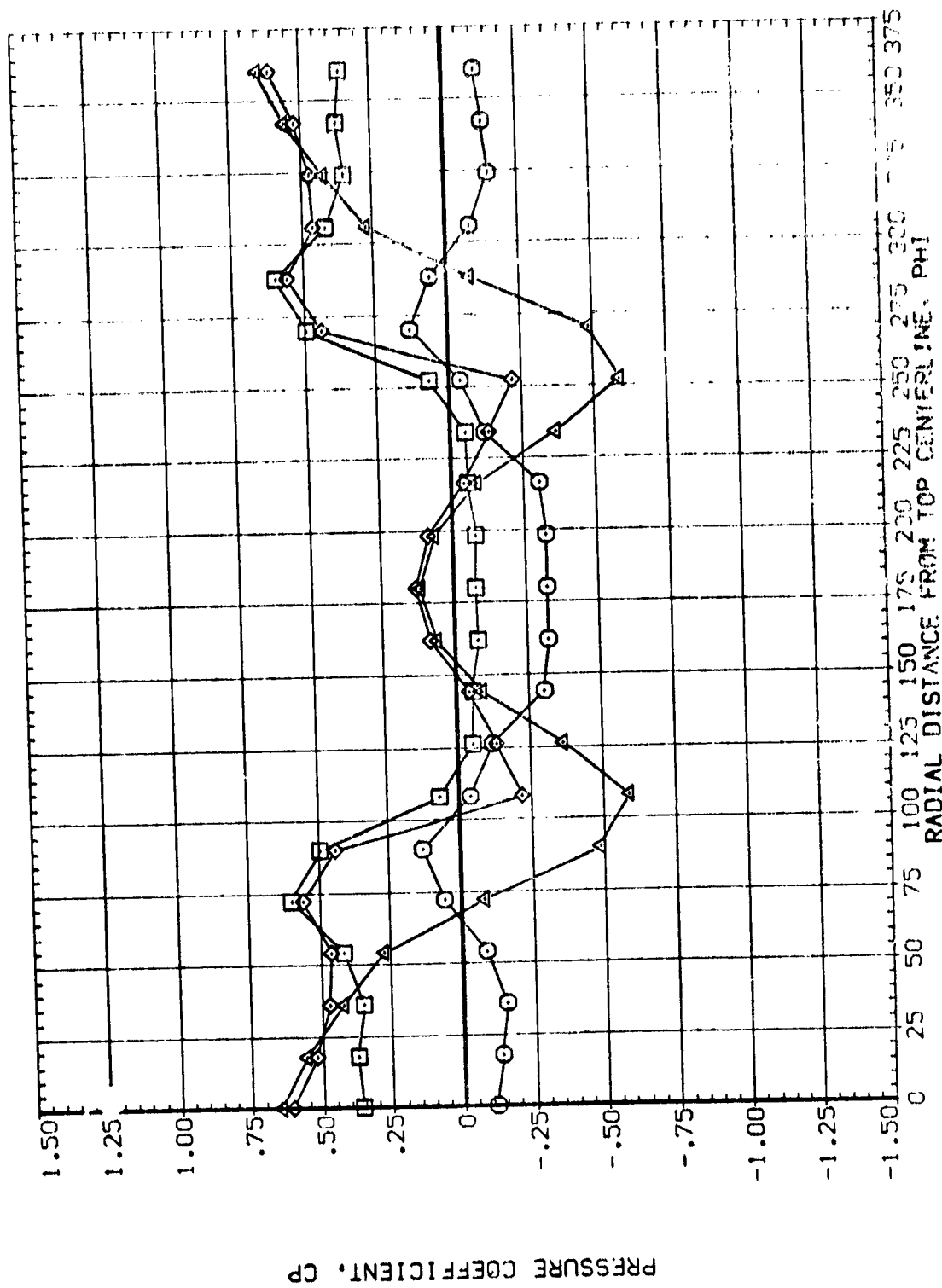


MEEC 567(1A32E) T9 S3/2 S3/2 03

0.271  
0.314  
0.350  
0.382

ALPHA	MACH
-8.000	1.250

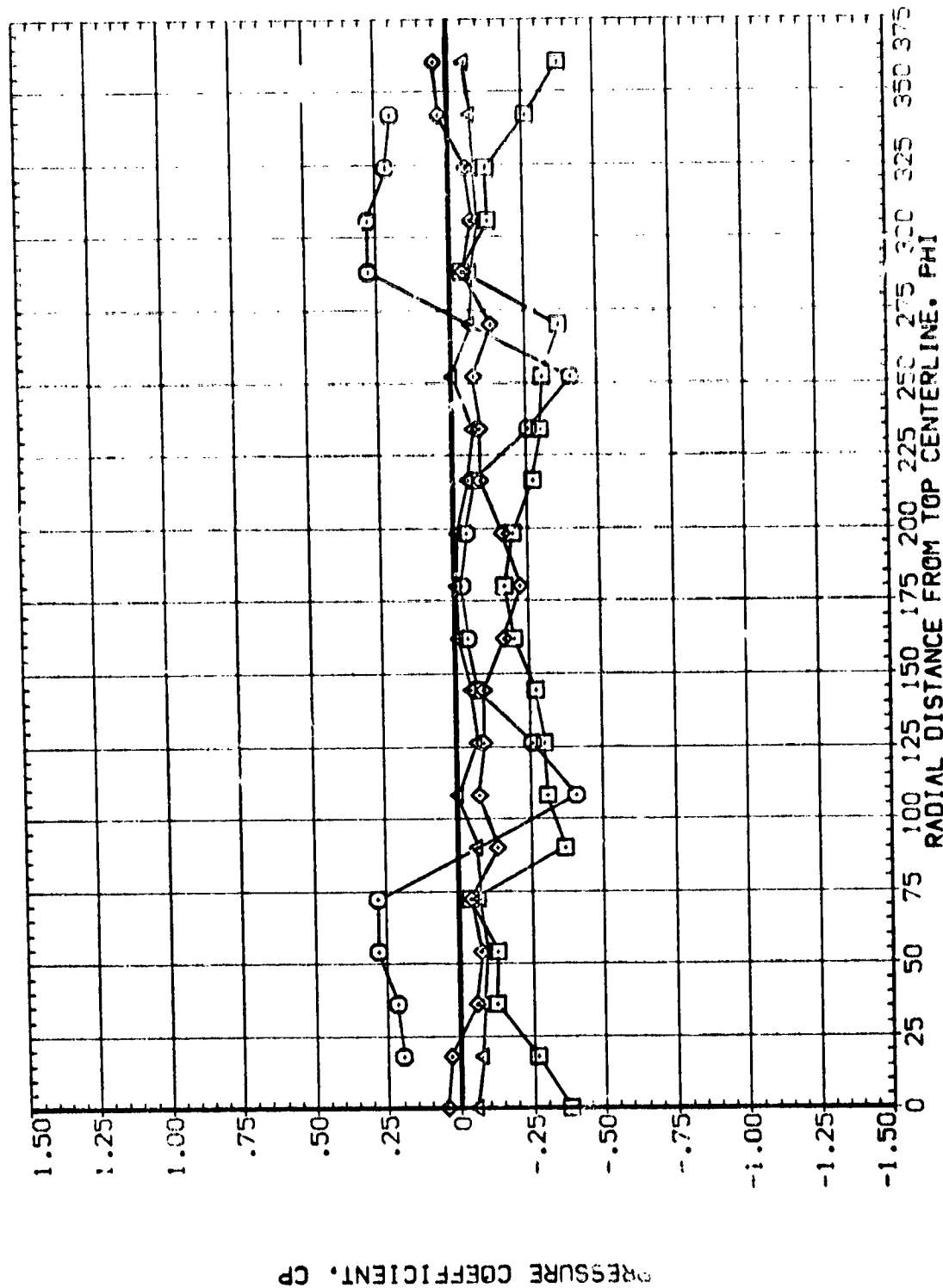
REFERENCE DATA	SQ. IN.	BETA	DELTA Z	X-SRB	PARAMETER VALUES
S-REF	6.198				.000
L-REF	5.313				.000
B-REF	5.313				.140
X-RP	2.549				.000
V-RP	.000				.000
Z-RP	.000				.000
					.500
					.000
					.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK 19 53/2 53/2 53

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A827010)

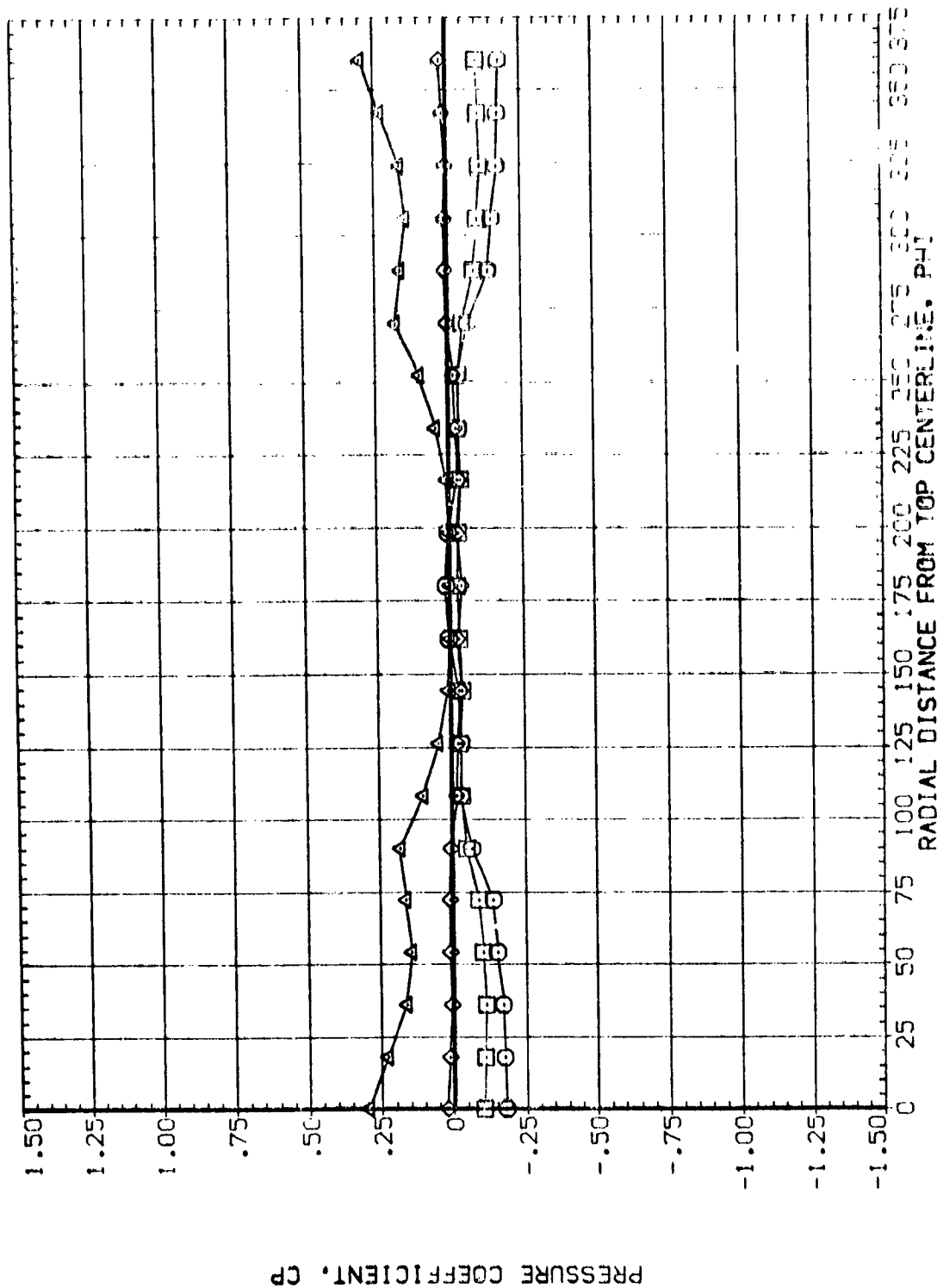
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	BETA	DELTA Z	DELTA X
◇	.438	-8.000	1.250	5.156	5.313	5.313	2.549	IN.	.000	.140	.000
□	.506							IN.	.000	.000	.500
△	.573							IN.			
▽	.641							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	SG. IN.	BETA	CONFID	CONFID	
○	.708	-8.000	1.250	LREF	5.313	DELTAZ	.000	RUSER	.000
□	.776			BREF	5.313	Y-S98	.000	DS91NC	.500
◇	.844			XPROP	2.548				
△	.912			YPROP	.000				
				ZPROP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

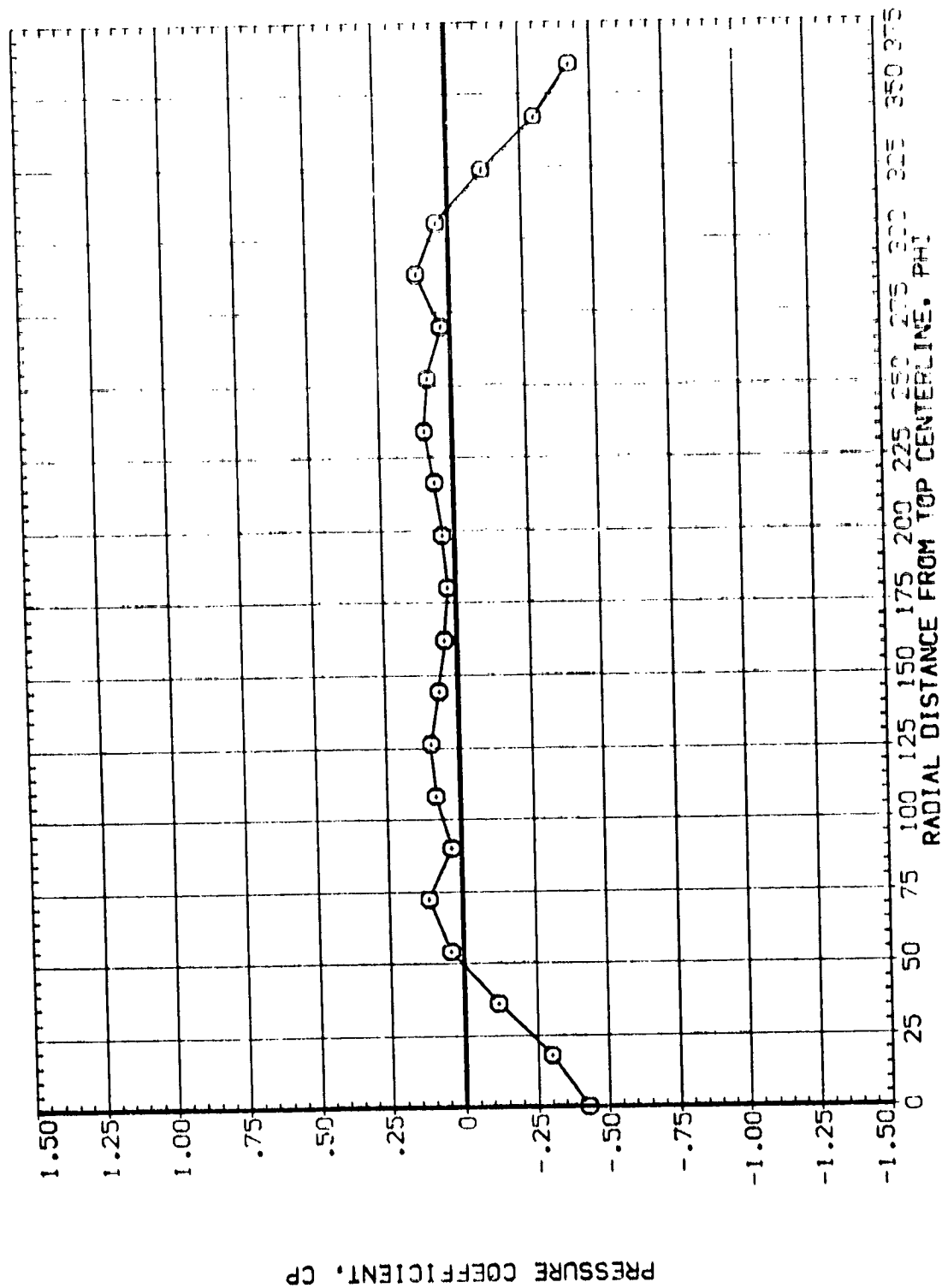
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK CAS27011

SYMBOL  
O

X/LT .984 ALPHA -8.000 MACH 1.250

REFERENCE DATA  
SREF 6.198 SQ. IN.  
LREF 3.313 IN.  
BREF 3.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

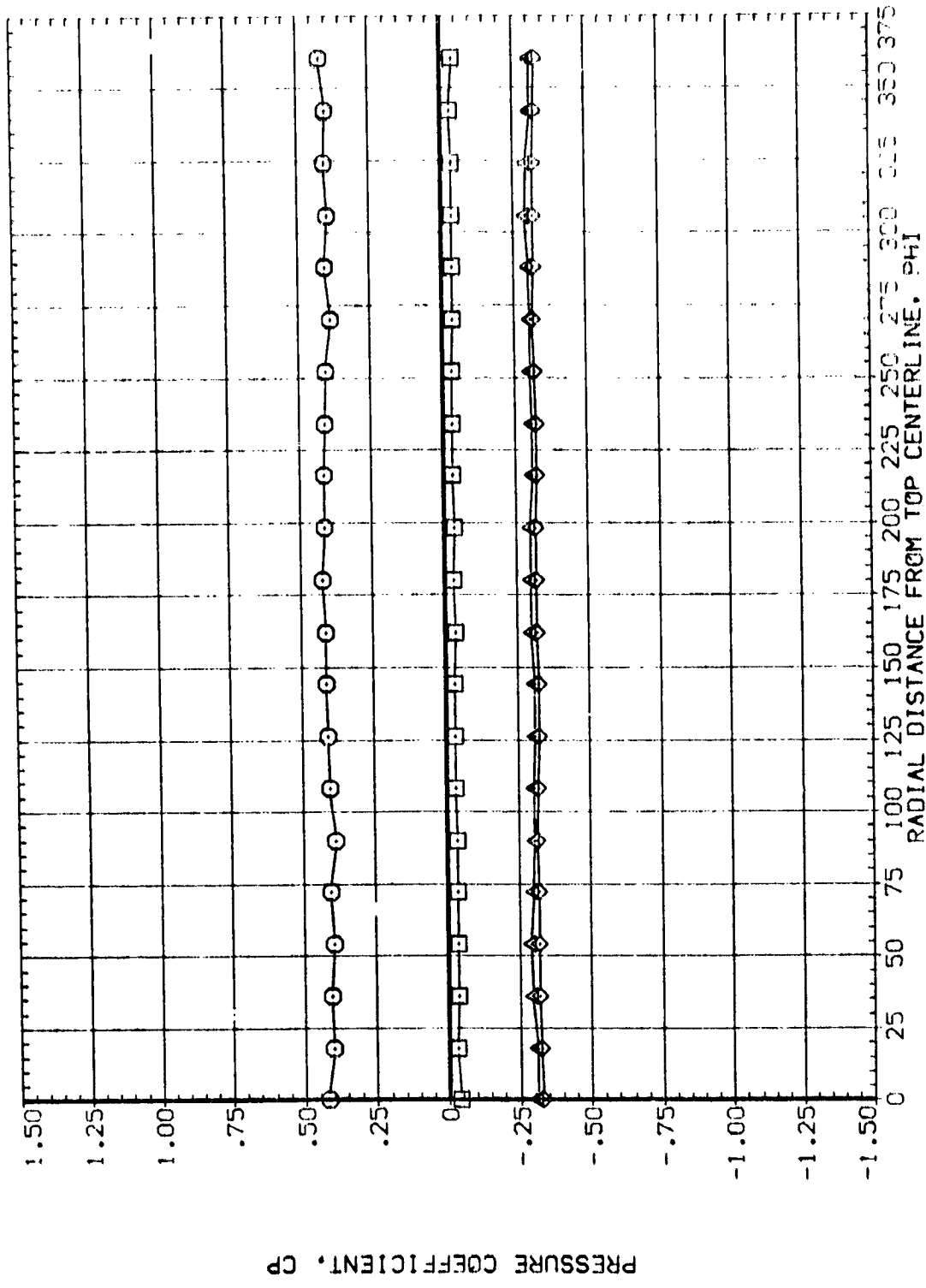
PARAMETER VALUES  
CDSFUS 90.000  
CJIC 1.000  
CJIC 1.000  
CJIC 1.000  
CJIC 1.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

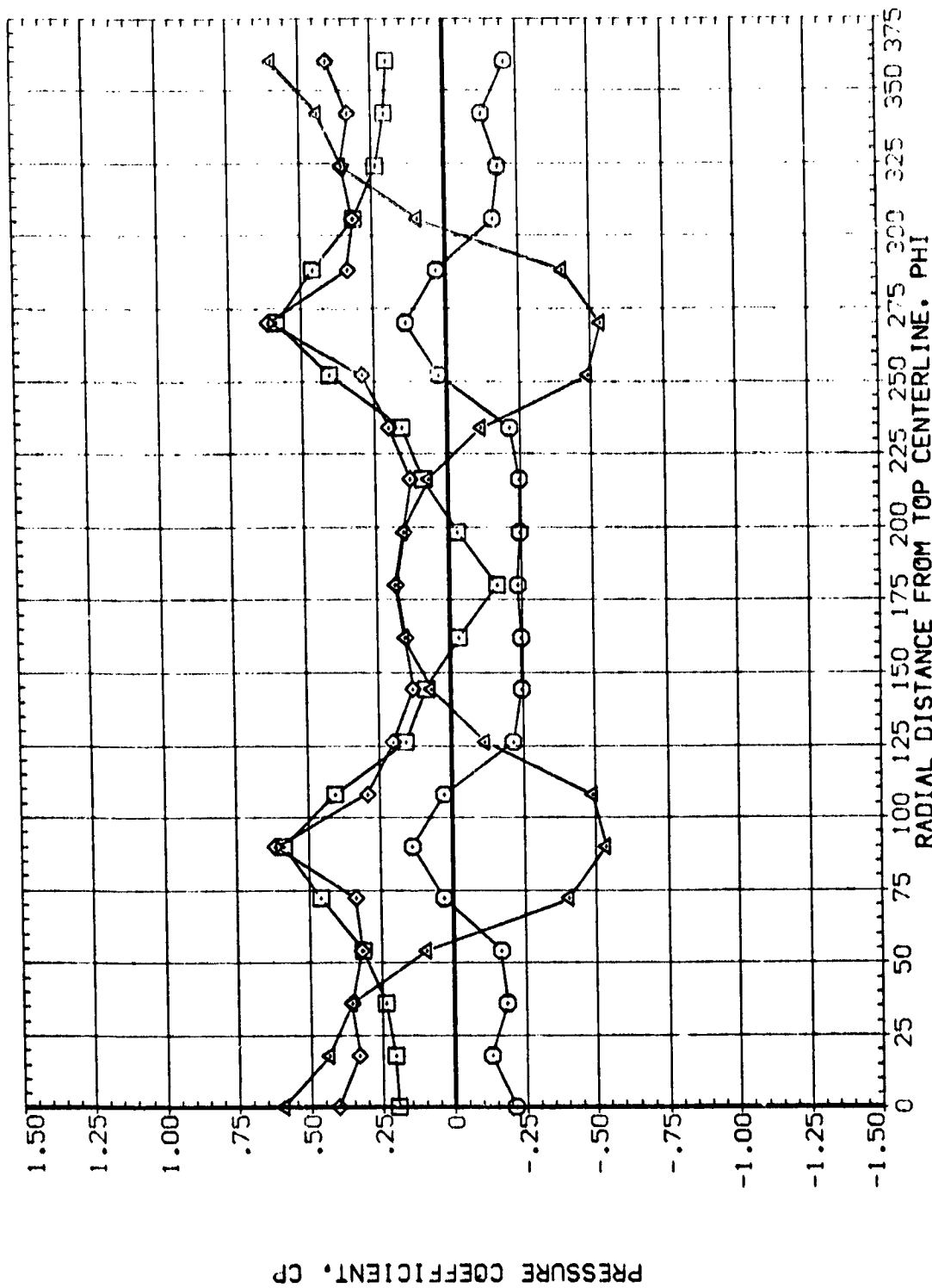
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	BETA	.000	CONFIS	90.000		
○	.076	.000	1.250	LREF	5.313	DELTAZ	.000	RODER	.000		
□	.155			BREF	5.313	X-SRB	.000	CRG INC	.500		
◇	.220			XMRP	2.549						
△	.235			YMRP	.000						
				ZMRP	.000						



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (AS2T01)

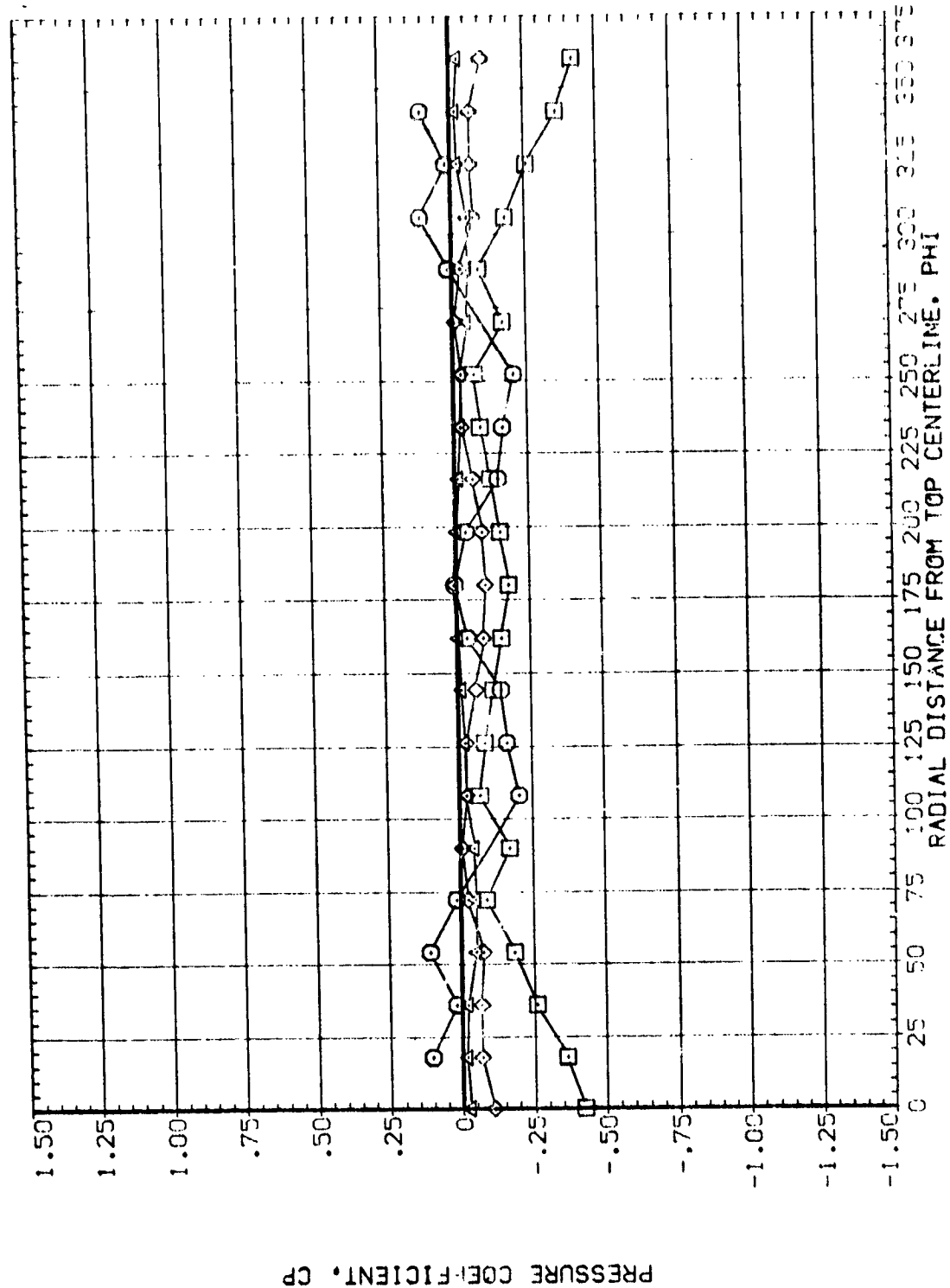
SYMBOL	X/RT	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	.271	.000	1.250	SREF 6.198	DELTA Z	0.000
□	.314			LREF 5.313	DELTA Z	.000
◇	.350			BREF 5.313	DELTA Z	.000
△	.382			XREF 2.548	DELTA Z	.000
				YREF .000	DELTA Z	.000
				ZREF .000	DELTA Z	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/RT	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.438	.000	1.250	SREF 6.198	CONFIS 90.000
□	.506			LREF 5.313	.000
◇	.573			BREF 5.313	.040
▽	.641			XREF 2.549	RUDER .000
				YREF .000	DRONE .500
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

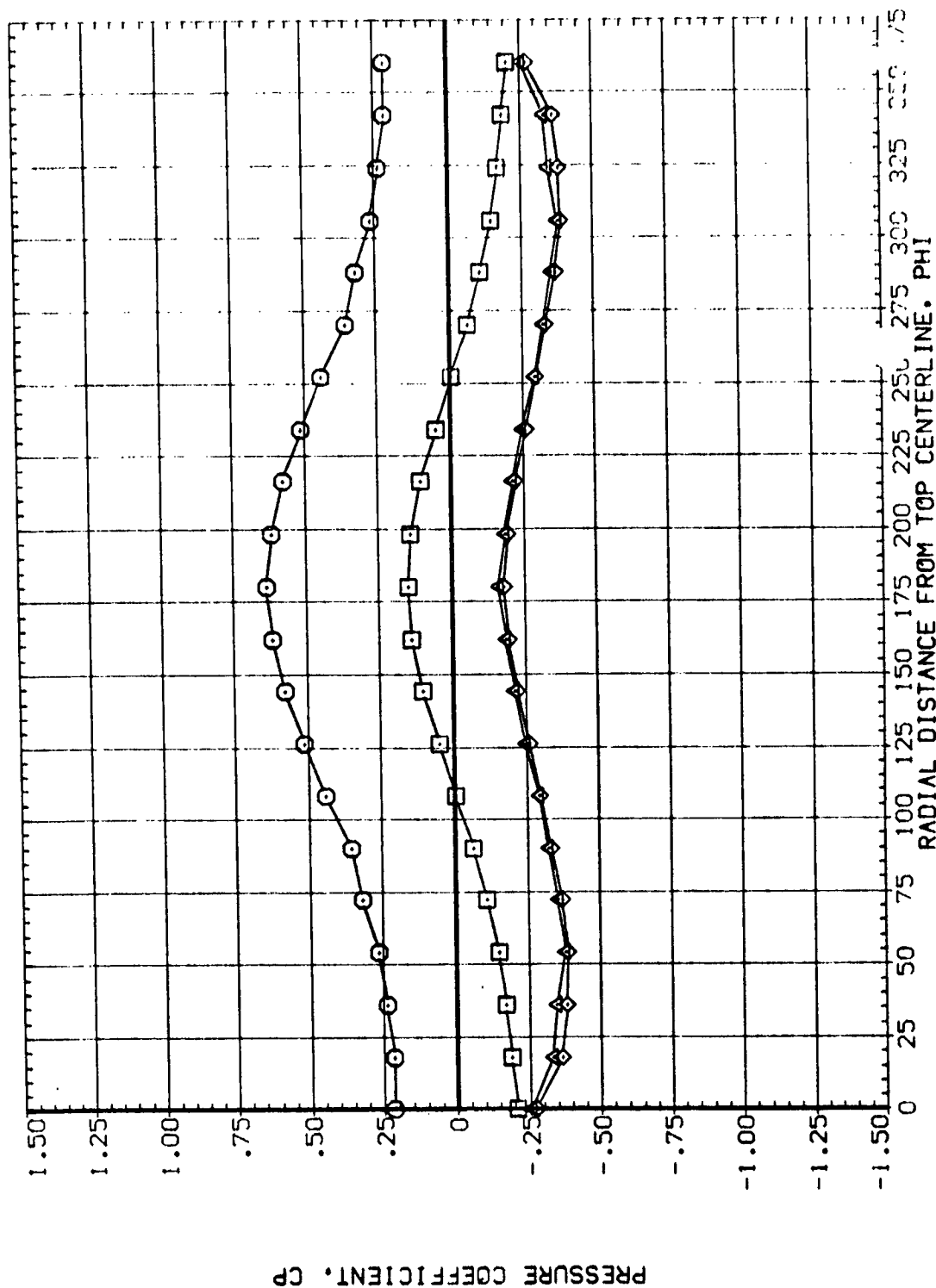






# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T010)

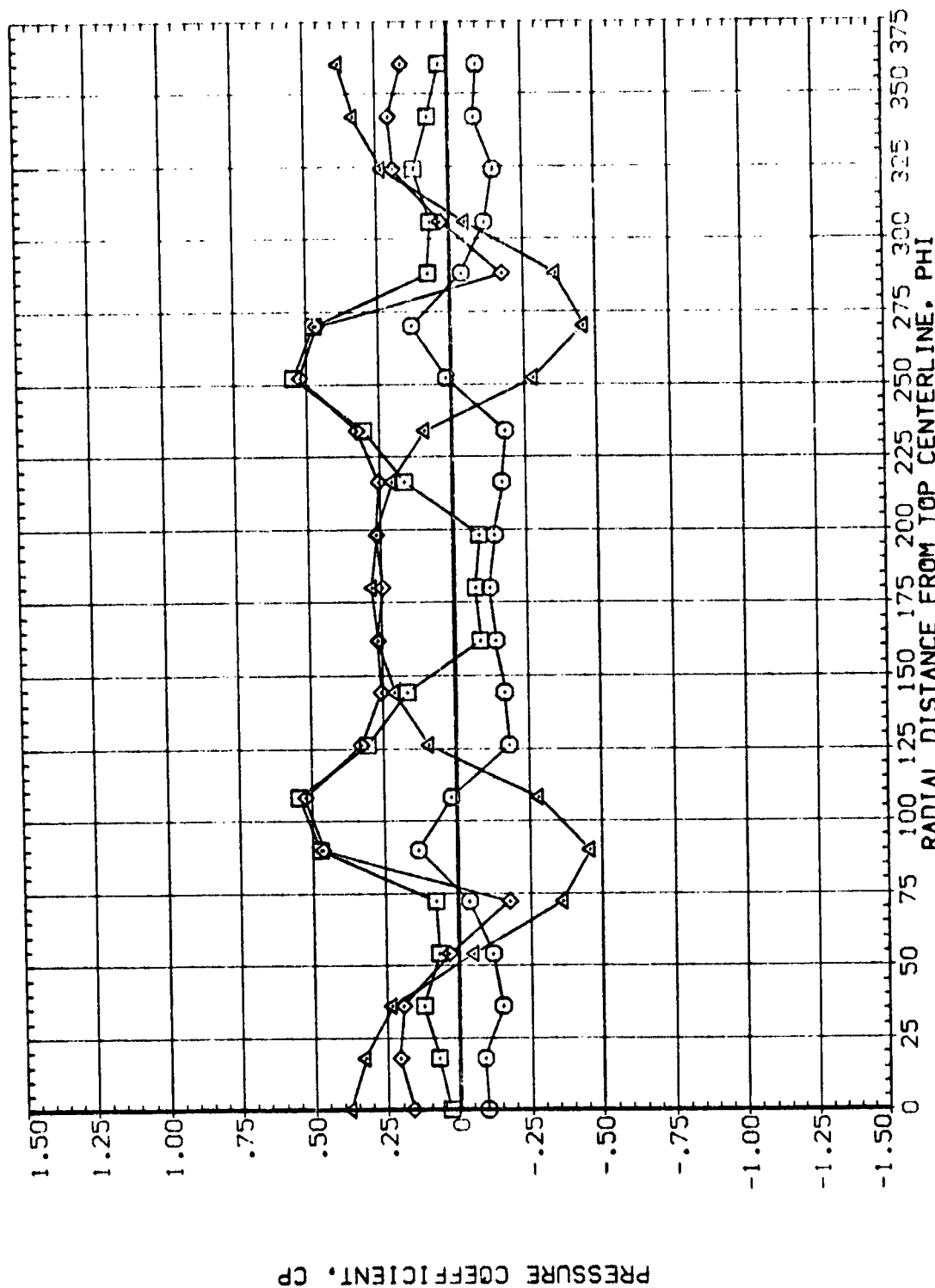
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SD, IN.	BETA	CONFIS	90,000
◇	.076	8.000	1.250	5.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	.155							IN.	X-SRB	.000	.000
◇	.220							IN.		.000	.000
◇	.235							IN.		.000	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

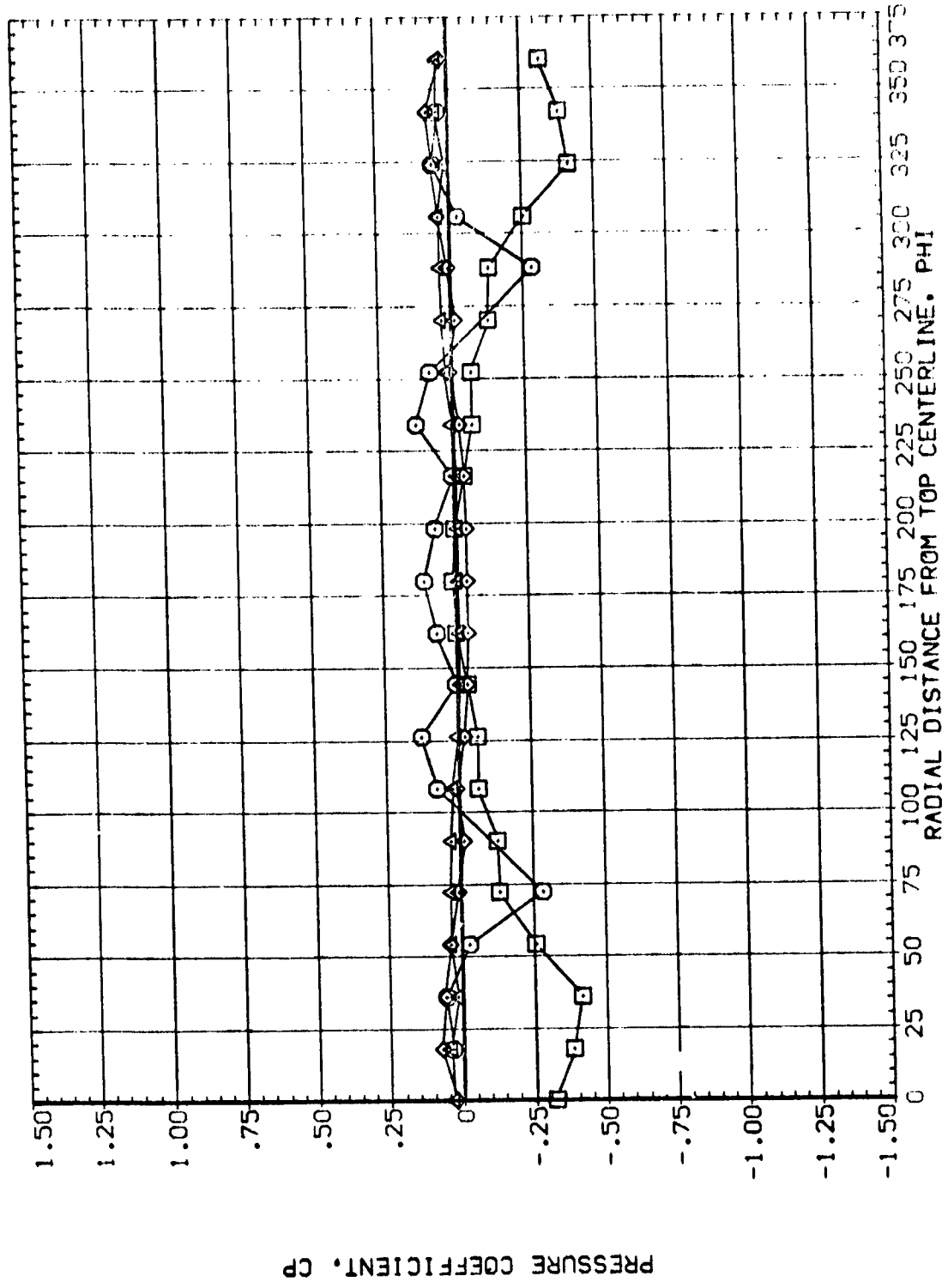
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	DELTA Z	CONF IG	RUDDER
○	.271	8.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.000
□	.314							X-SRB	.000	.000	.000
◇	.350										.000
△	.382										.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

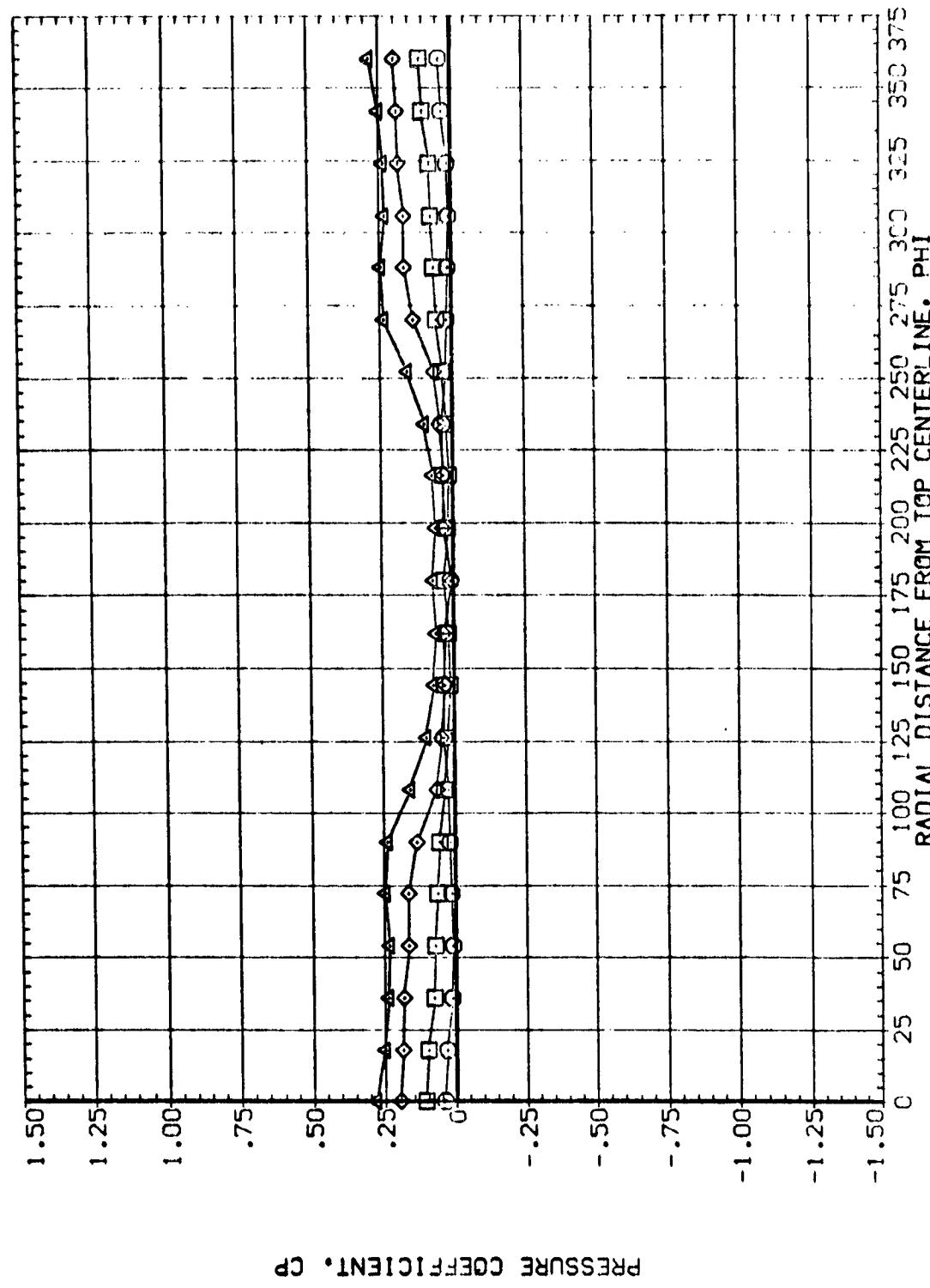
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	DELTAZ	X-SRB	CONFIS
○	.438	8.000	1.250	6.198	5.313	5.313	2.548	.000	.140	.000	.000
□	.506									.000	.500
◇	.573										
△	.641										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

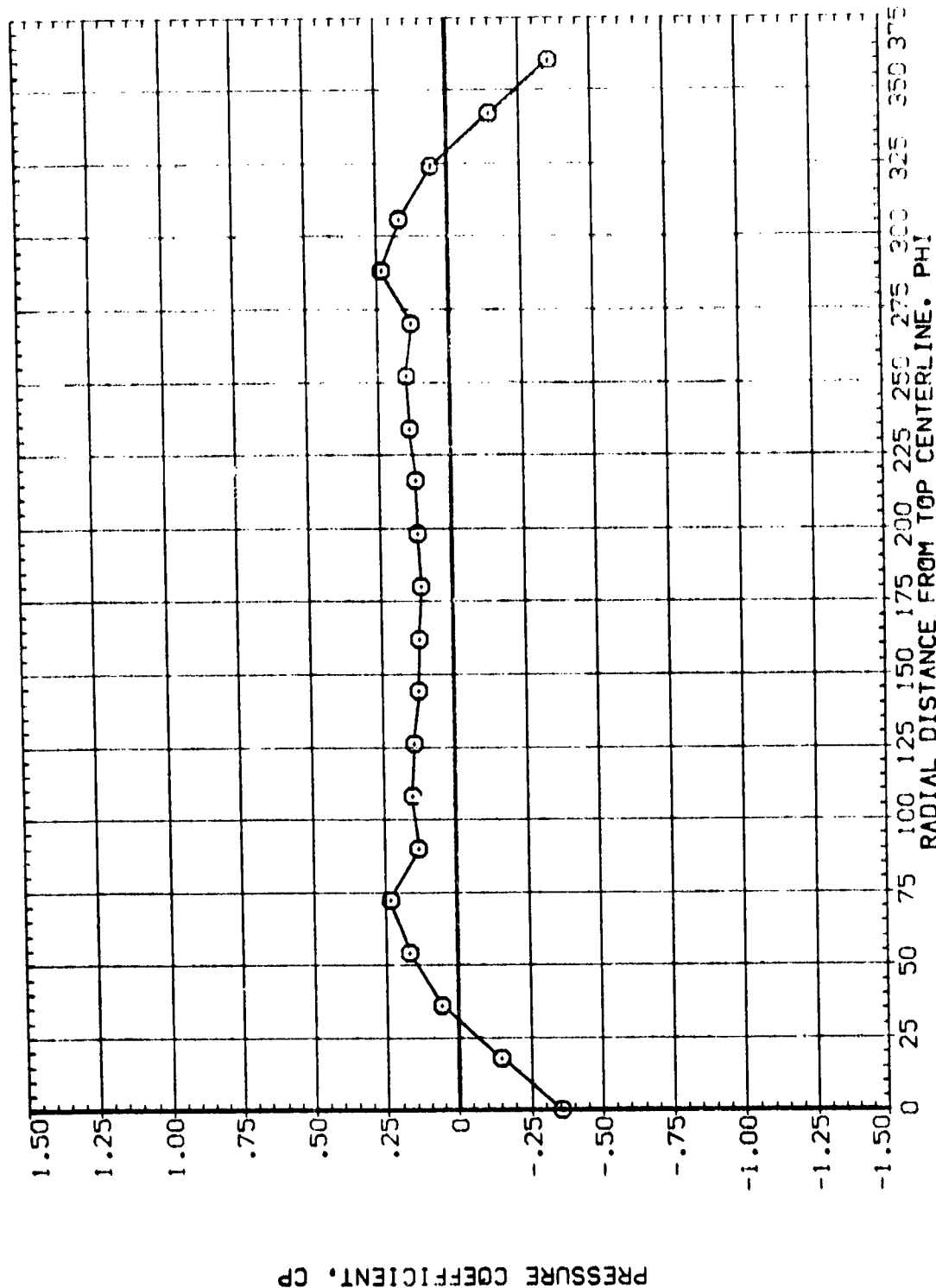
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	BETA	CONF IG	R-ORDER
□	.708	8.000	1.250	6.198	5.313	5.313	2.549	.000	.000	.140	.000
◇	.776								X-SRB		.500
△	.844										
▽	.912										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82TC1)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	BETA	CONFIS
O	.984	8.000	1.250	LREF	5.313	DELTA Z	.140
				BREF	5.313	X-SRB	.000
				YMRP	2.549		.000
				ZMRP	.000		.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL  
○  
□  
◇  
△

X/LT .076  
.155  
.220  
.235

ALPHA -8.000

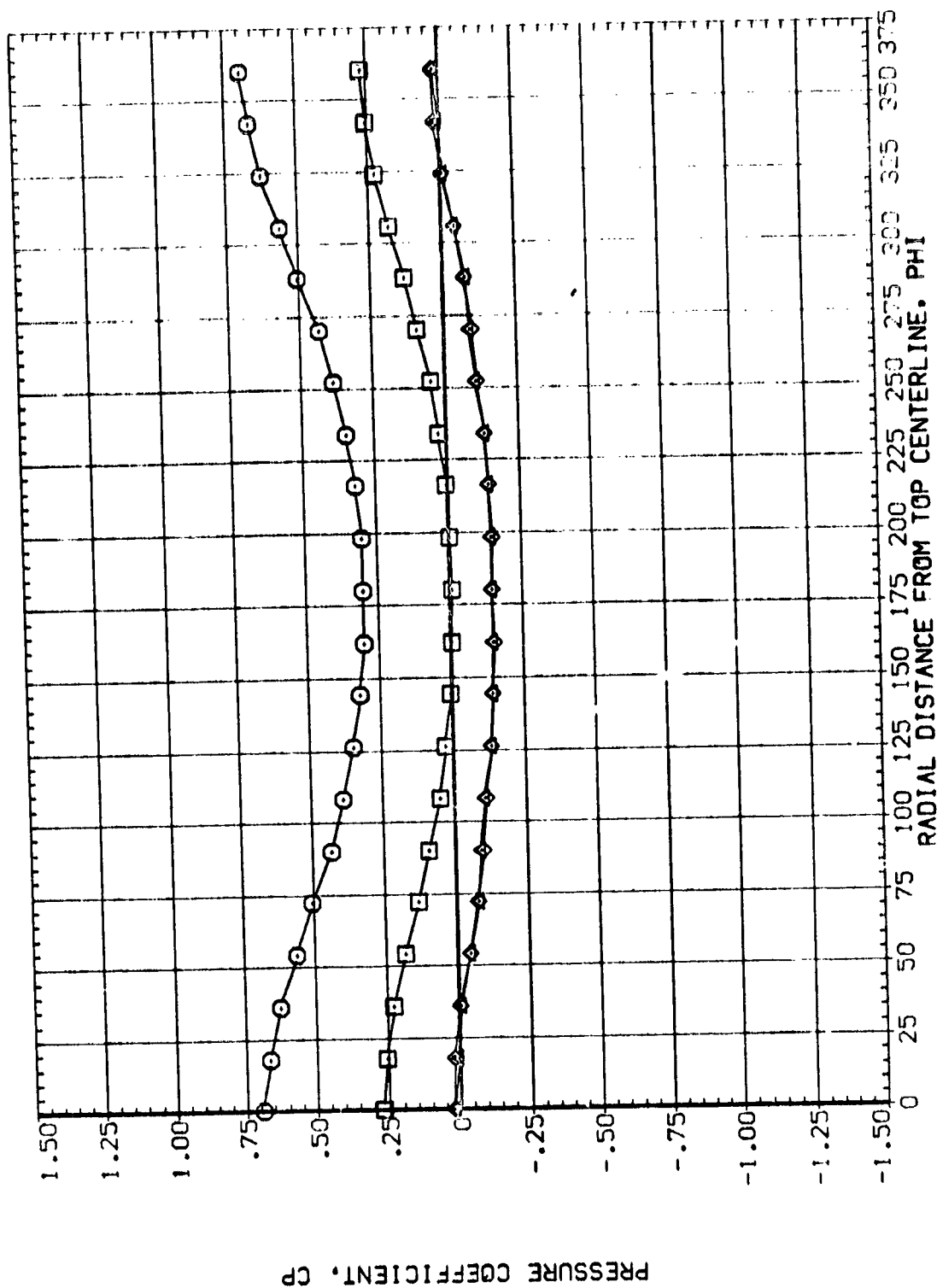
MACH 1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SG. IN.  
IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
N-SRB

PARAMETRIC VALUES  
.000 CONF 15  
.140 RUDDER  
.000 999INC  
90.000  
000  
500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

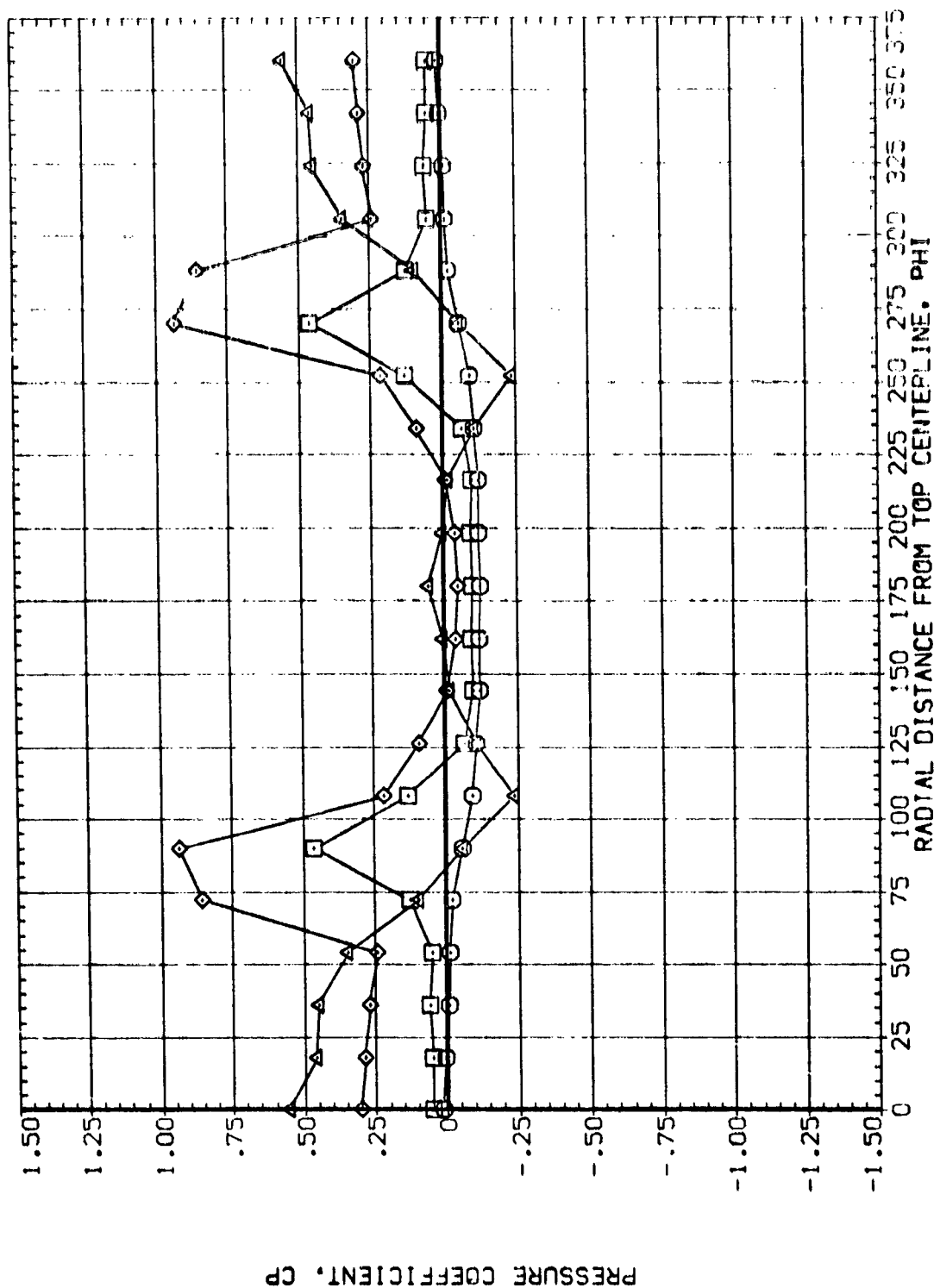
MSFC 56701A32F1 T9 S3/2 S3/2 03

Symbol

X/LT	ALPHA	MACH
.271	-8.000	1.960
.314		
.350		
.382		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMMP	2.549
YMMP	.000
ZMMP	.000

BETA	.000	CONFID	50.000
DELTA Z	.140	PLAUSER	.000
X-SER	.000	PREPAC	.500

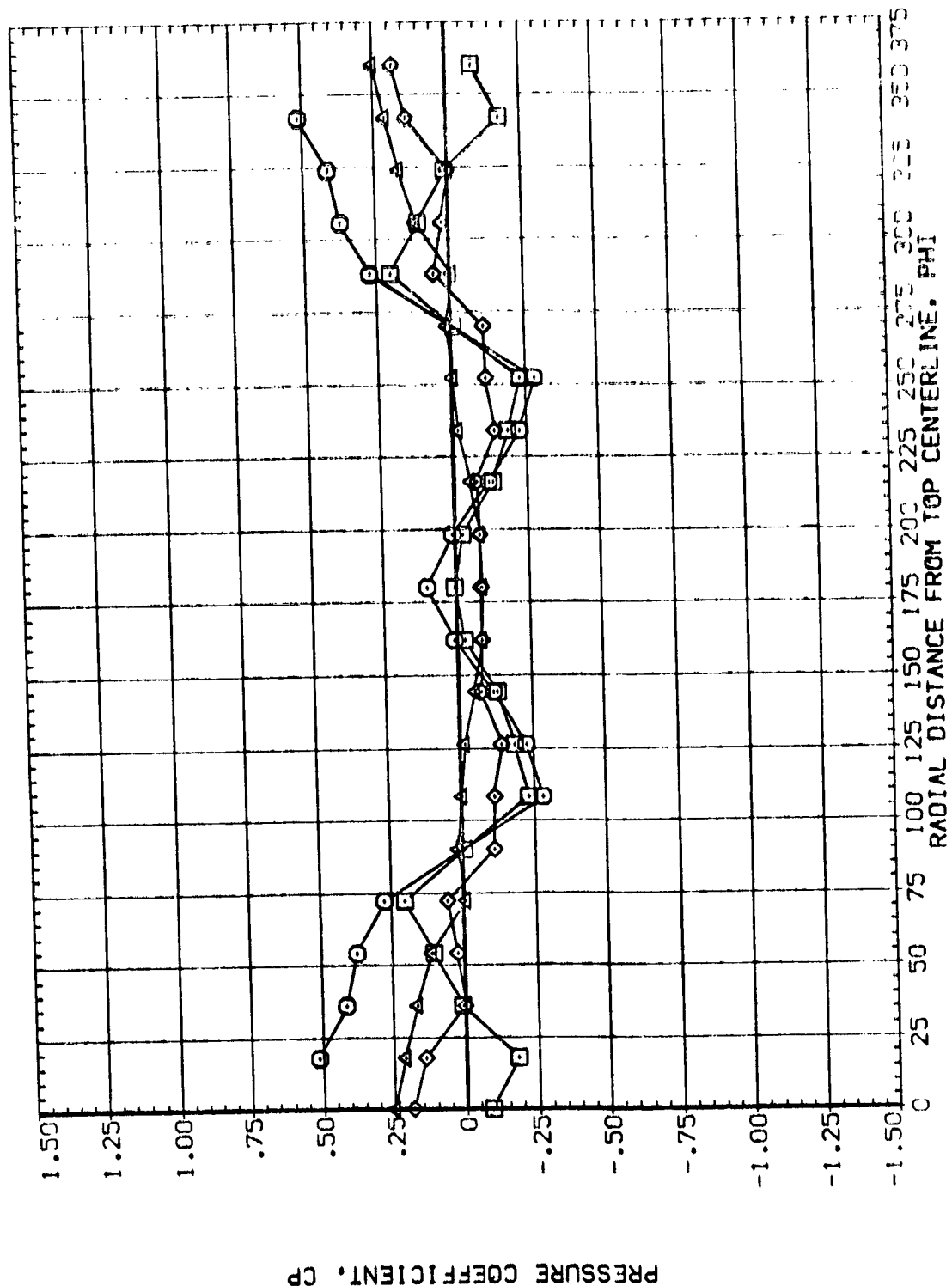


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/ALT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	SO.IN.	BETA	CONF16	CONF16	
◇	.438	-8.000	1.960	LREF	5.313	DELTA2	.000	.000	.000
□	.506			BREF	5.313	X-S08	.140	.000	.000
△	.573			YMRP	2.549		.000	.000	.500
▽	.641			ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

305-  
305-  
305-06

SECRET - 11

305-  
306-  
307-06

2156  
2306  
5730

33-1110

522

DATE 6-1985

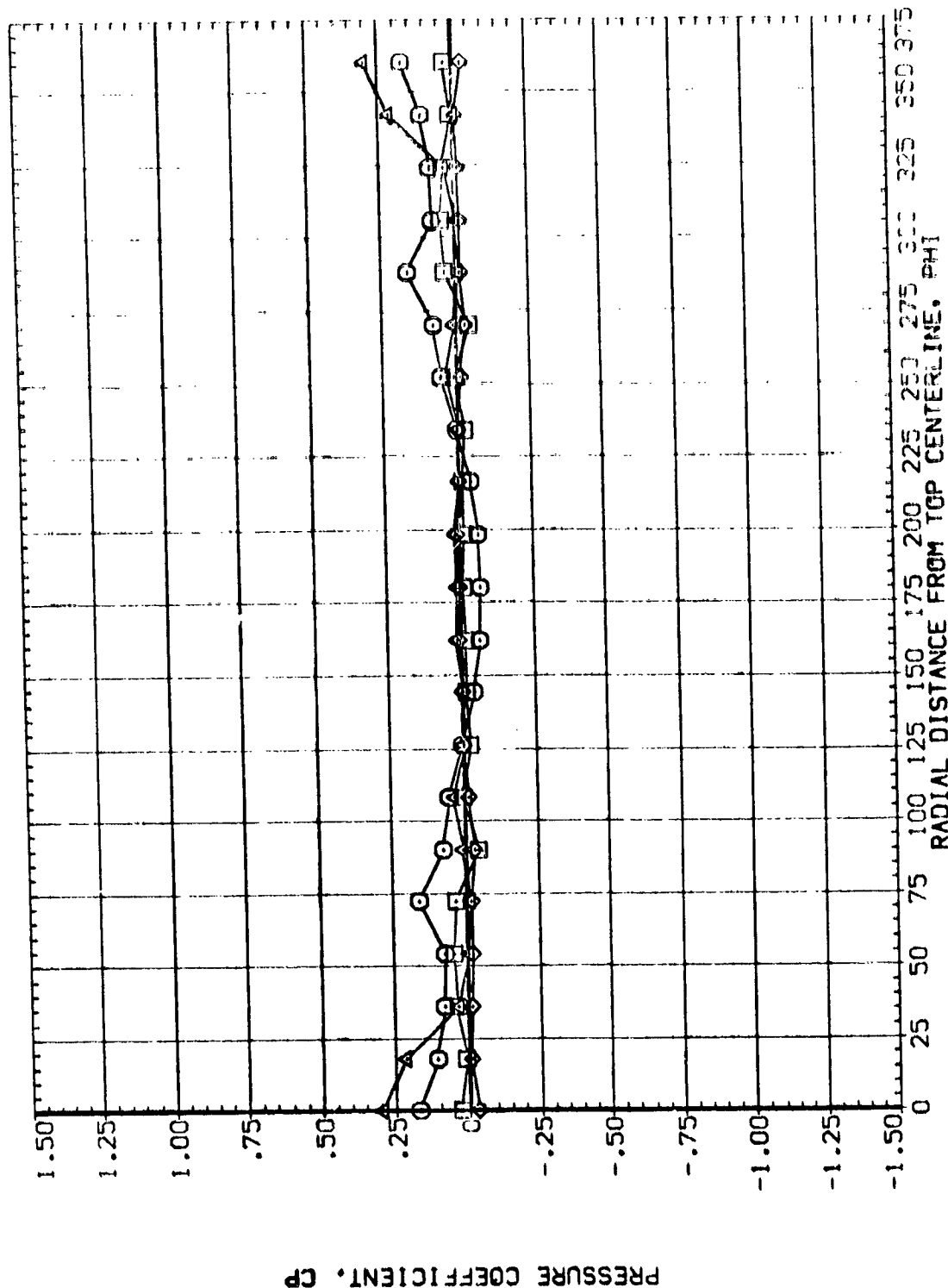
3365  
3364  
3363  
3362  
3361

0951  
MACH

ALPHA  
-8.0000

775  
708  
7

00  
51:50



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK '9 S3/2 S3/2 S3



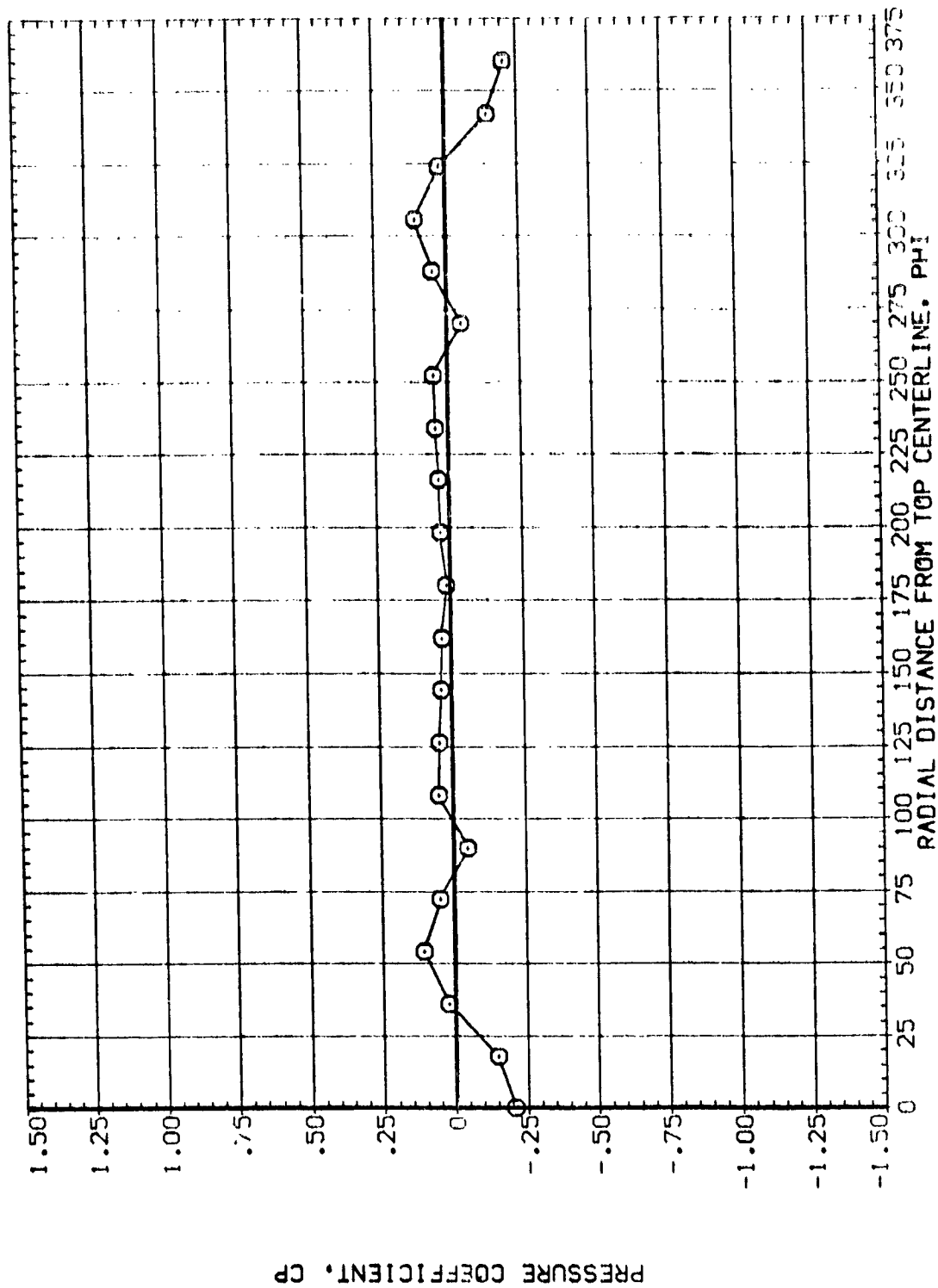
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82101)

SYMBOL  
O

X/LT .984 ALPHA -8.000 MACH 1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

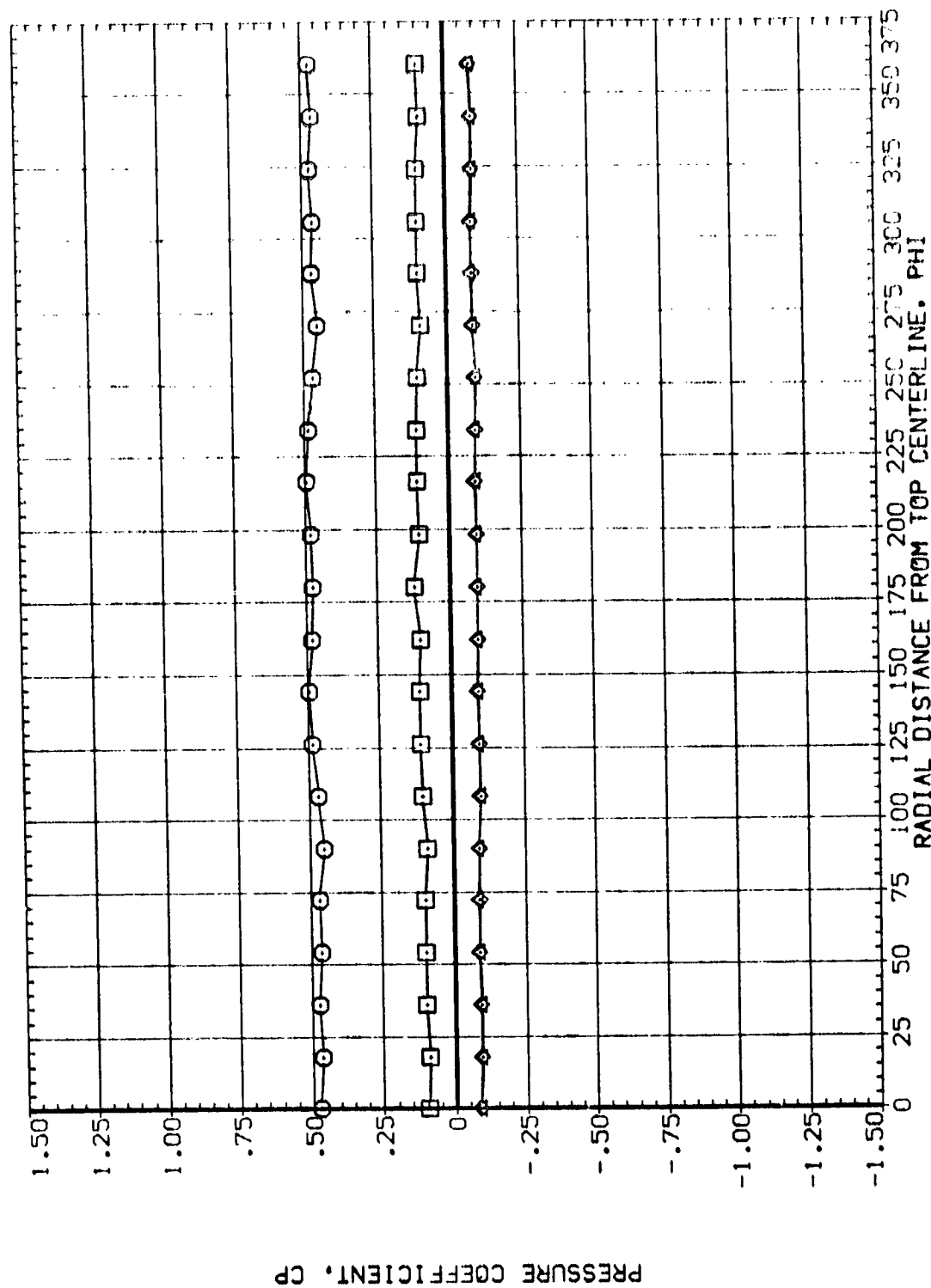
PARAMETRIC VALUES  
BETA .000 CD\*15 90.000  
DELTAZ .140 PL\*DER .000  
X-SRB .000 ORB\*IC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SO. IN.	BETA	CONF IS	90.000
○	.076	.000	1.950	5.199	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	.155							IN.	Y-SRB	.140	.000
◇	.220							IN.		.000	.000
△	.235							IN.		.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
◇  
□  
△

X/LT  
.271  
.314  
.350  
.382

ALPHA  
.000  
1.960

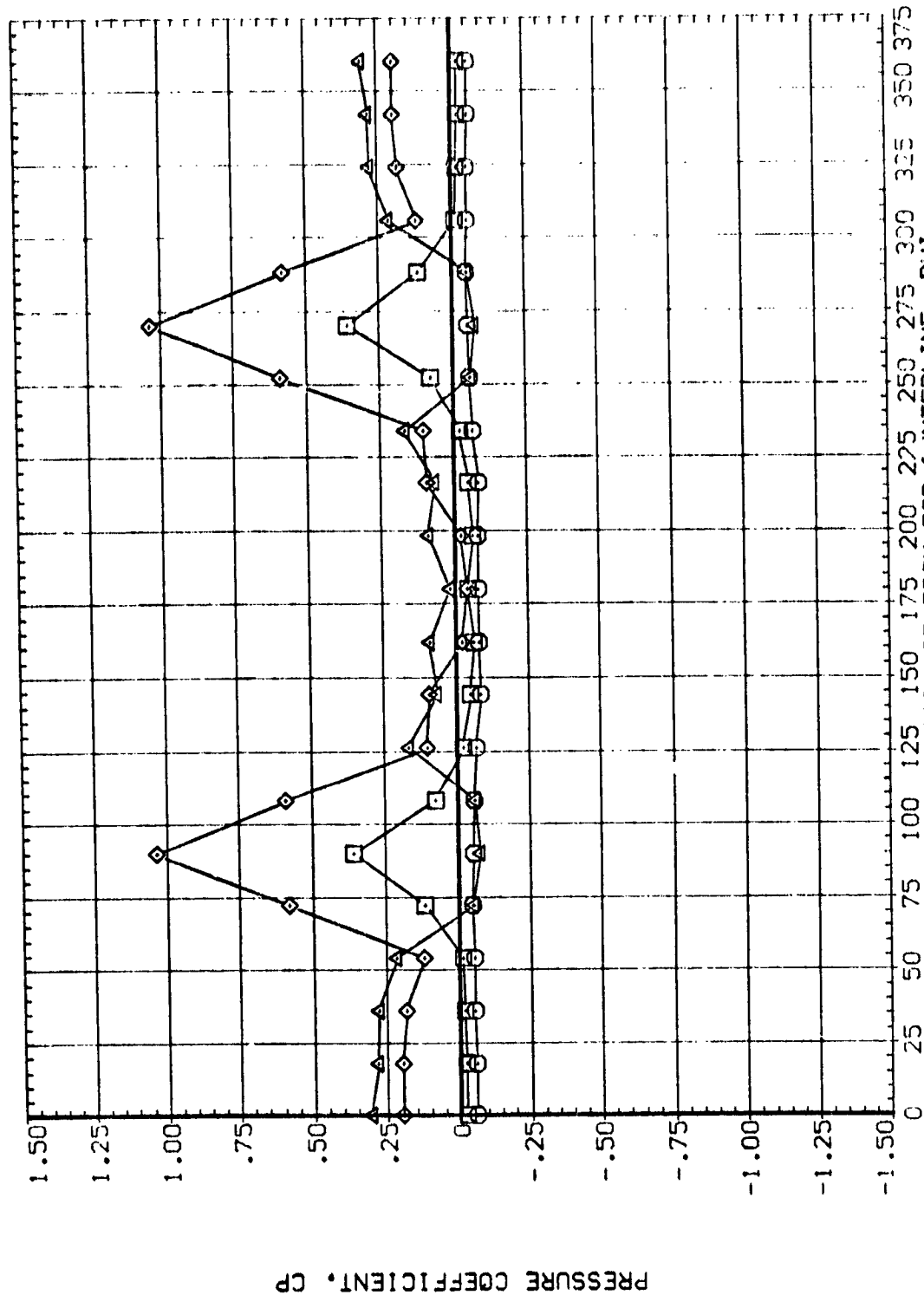
MACH  
1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000 CONFUS  
.140 RUDDER  
.000 ORBITAL



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL  
 ○  
 □  
 ◇  
 △

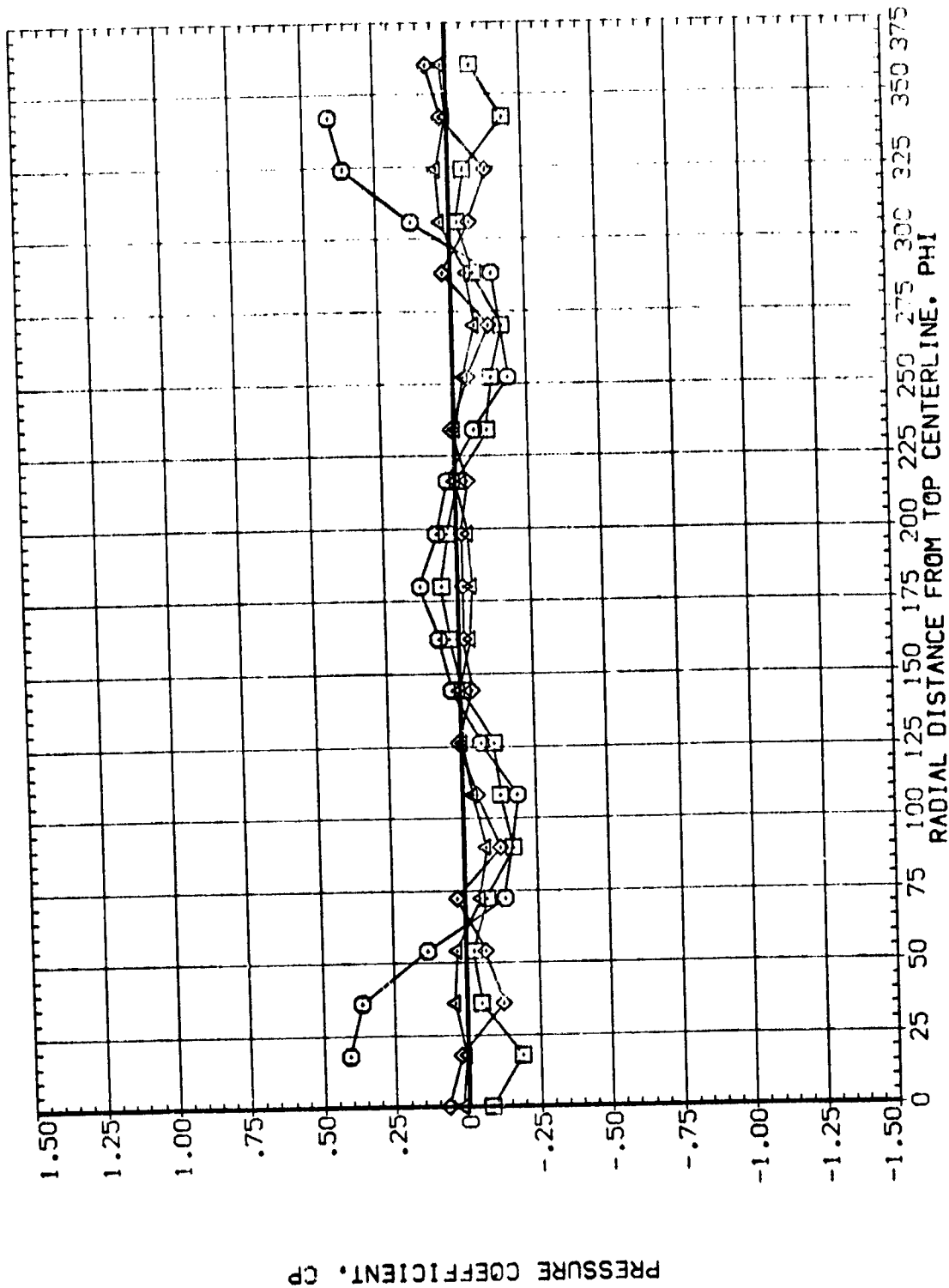
X/LT .438  
 .506  
 .573  
 .641

ALPHA .000  
 MACH 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.548  
 YMRP .000  
 ZMRP .000

BETA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 CONF IG .000  
 RUDDER .000  
 DRG INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

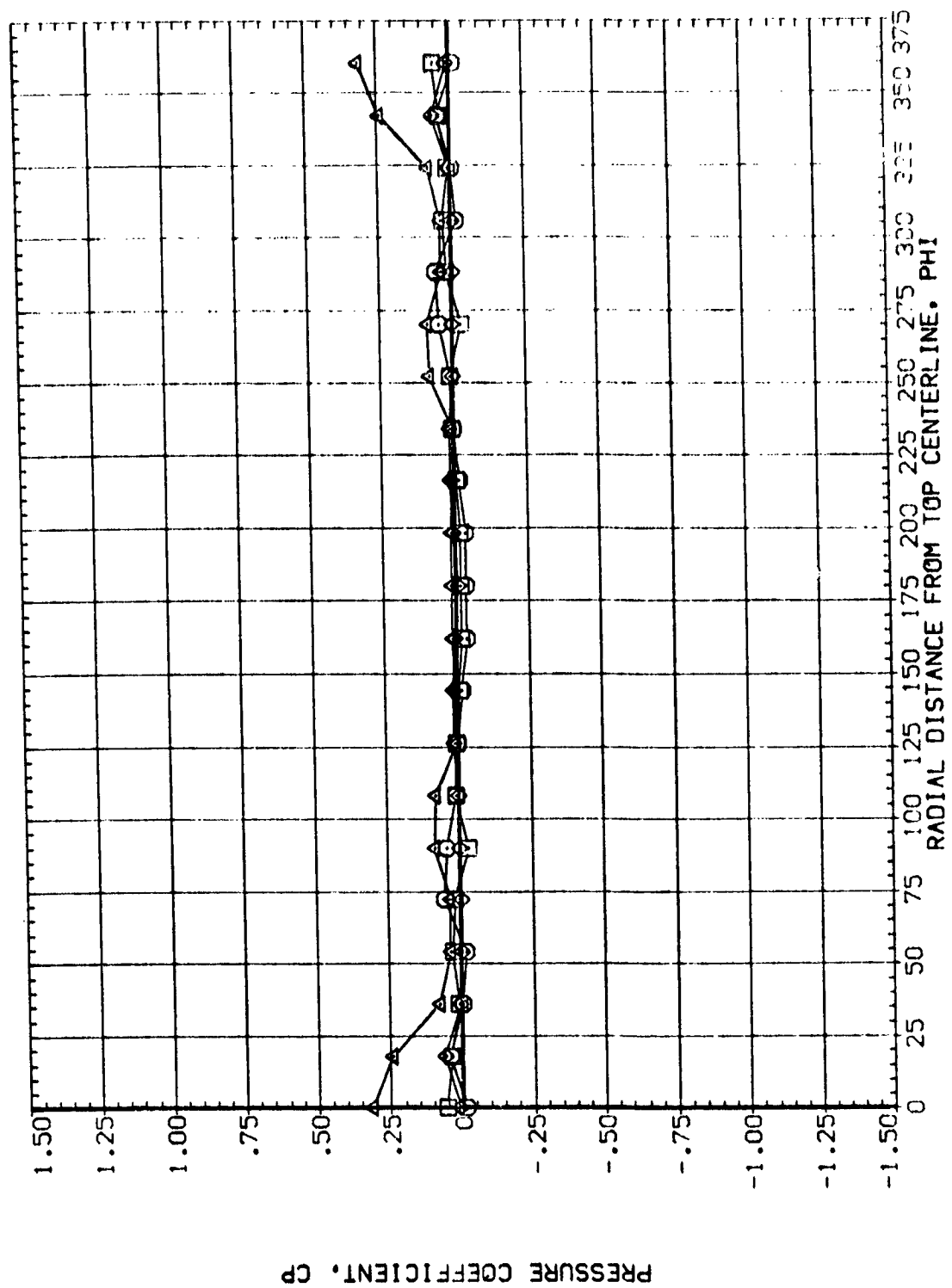
MCFC 56711A32F1 T9 S3/2 S3/2 03

SYMBOL

LT	ALPHA	MACH
.708	.000	1.960
.776		
.844		
.912		

	REFERENCE DATA
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

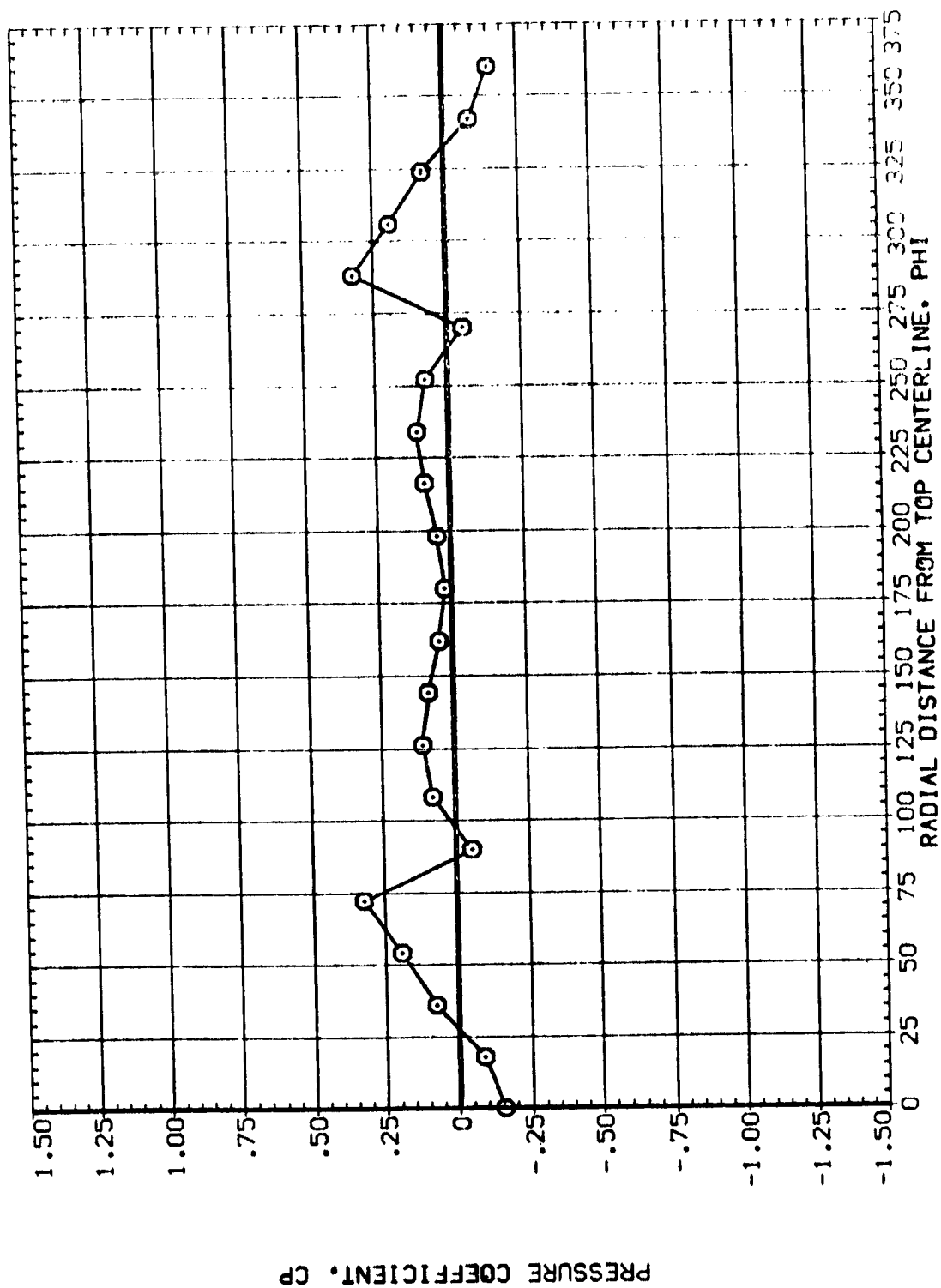
	PARAMETRIC VALUES
BETA	.000
DELTA Z	.140
X-SRB	.000
	90.000
	.000
	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

SYMBOL	X/VT	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
0	.984	.000	1.980	SREF 6.198	CONFIS 90.000
				LREF 5.313	.000
				BREF 5.313	.140
				XMPP 2.549	.000
				YMPP .000	.000
				ZMPP .000	.500
					DELTAZ
					X-SRB
					CONFIS
					RUDDER
					CONFIS



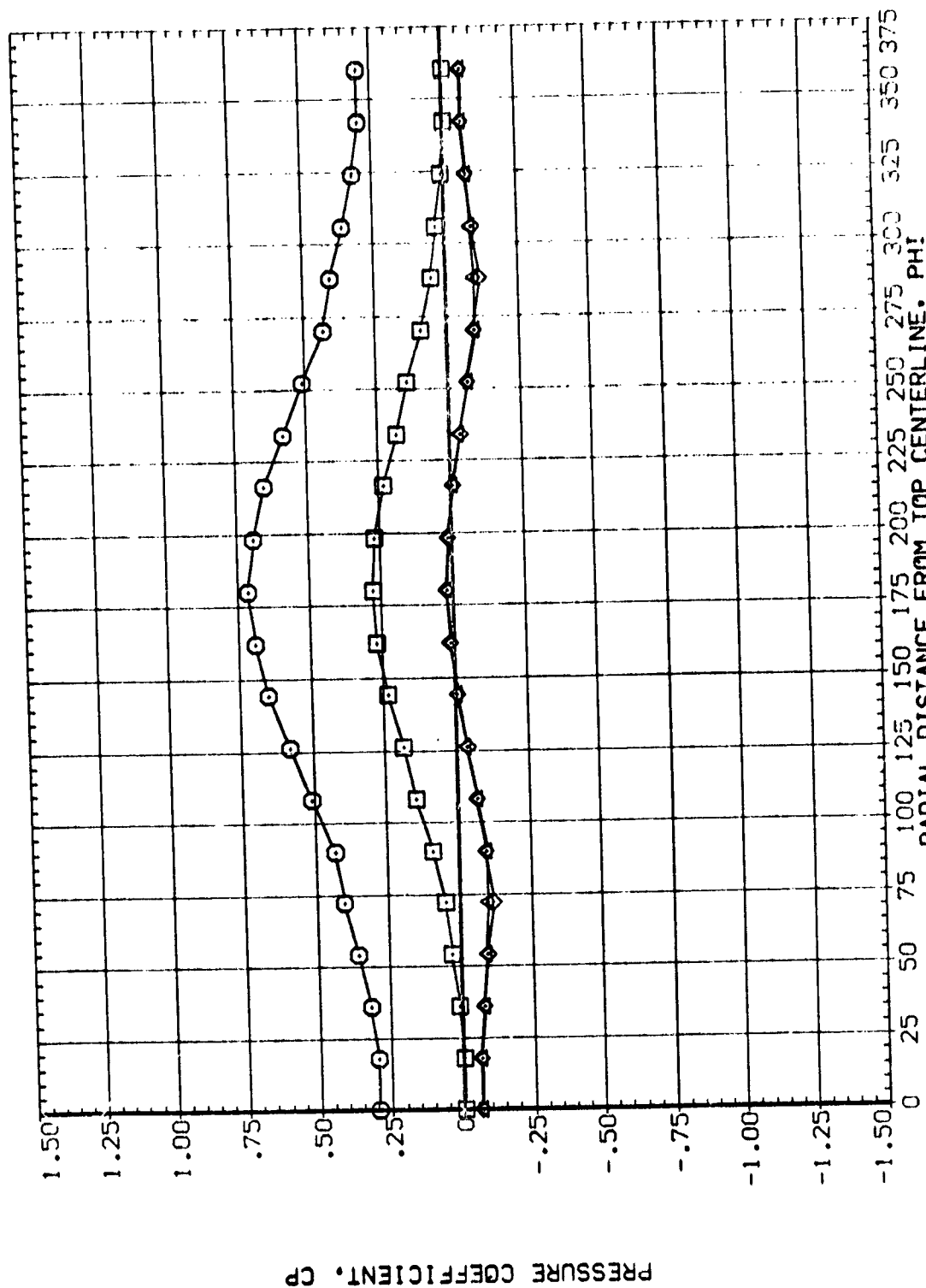
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

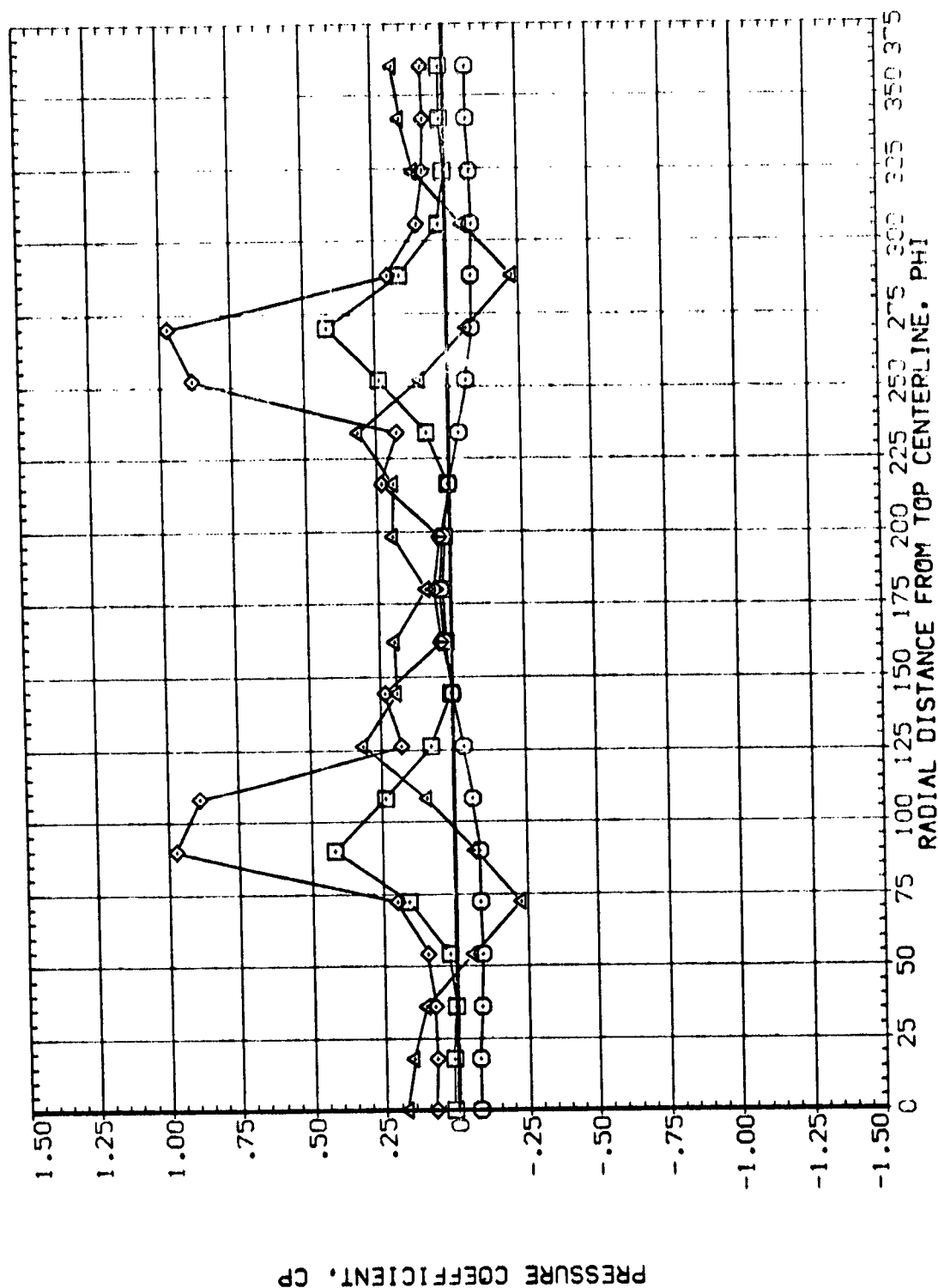
SYMBOL	X/LT		ALPHA	MACH	REFERENCE DATA		BETA	PARAMETRIC VALUES	
	.076	.155			SREF	SO. IN.		CONF IS	CONF IS
○	.155	.220	8.000	1.960	L REF	5.313	DELTA Z	.000	.000
□	.220	.235			B REF	5.313	Y-S98	.140	.000
△	.235				XMRP	2.548		.000	.500
					YMRP	.000			
					ZMRP	.000			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	BETA	CONFIS	CONFIS
○	.271	8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	.314							IN.	X-SRB	.000	.000
◇	.350							IN.		.000	.000
▽	.382							IN.		.000	.000

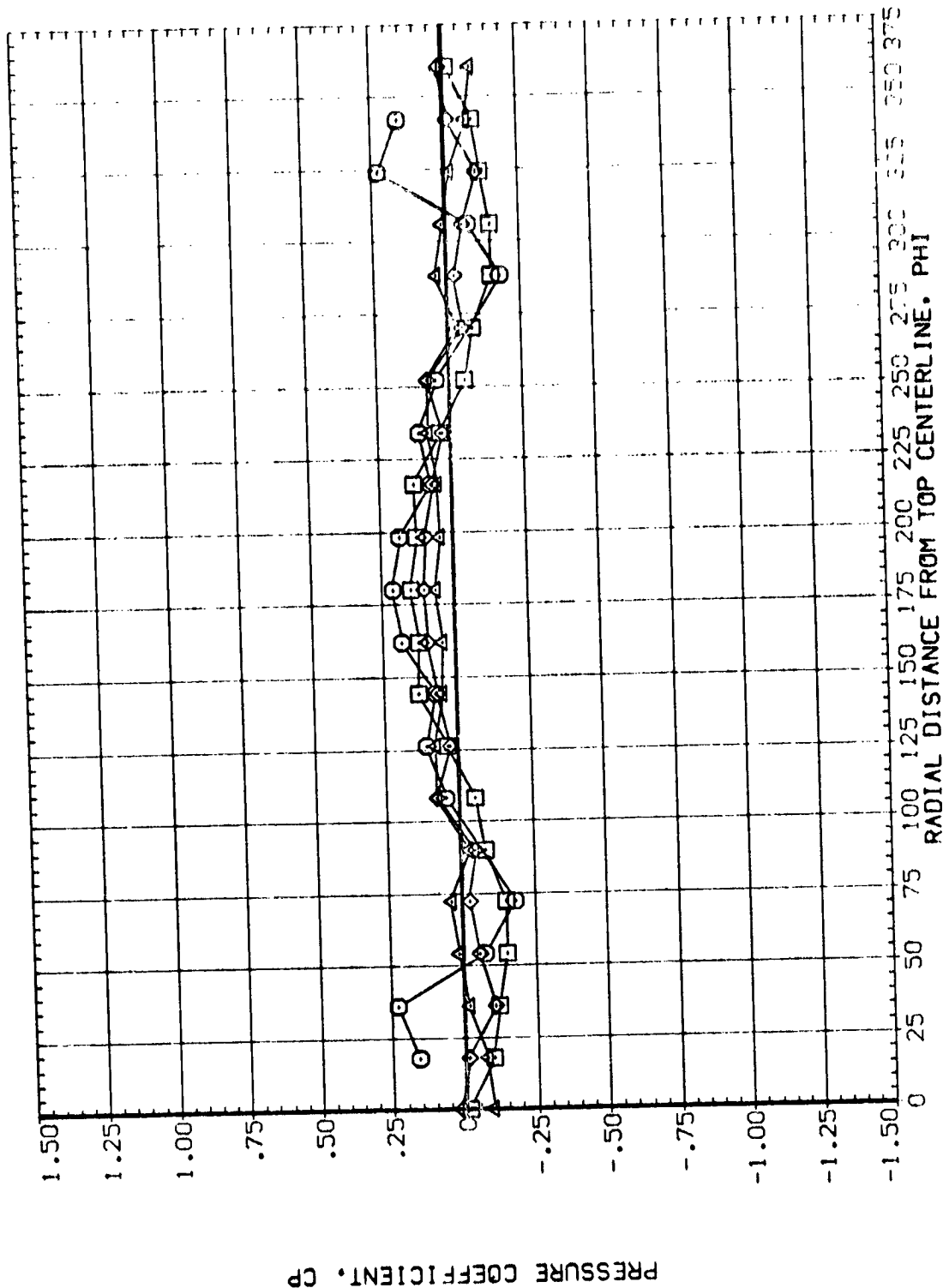


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	6.198	BETA	CONF IG
◇	.438	8.000	1.950	LREF	5.313	CELT AZ	RUDER
□	.506			BREF	5.313	γ-S98	DBB INC
○	.573			VMRP	2.549		
▽	.641			Z-MRP	.000		
							90.000
							.000
							.140
							.000
							.000
							.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82131)

SYMBOL  
 ○  
 □  
 ◇  
 △

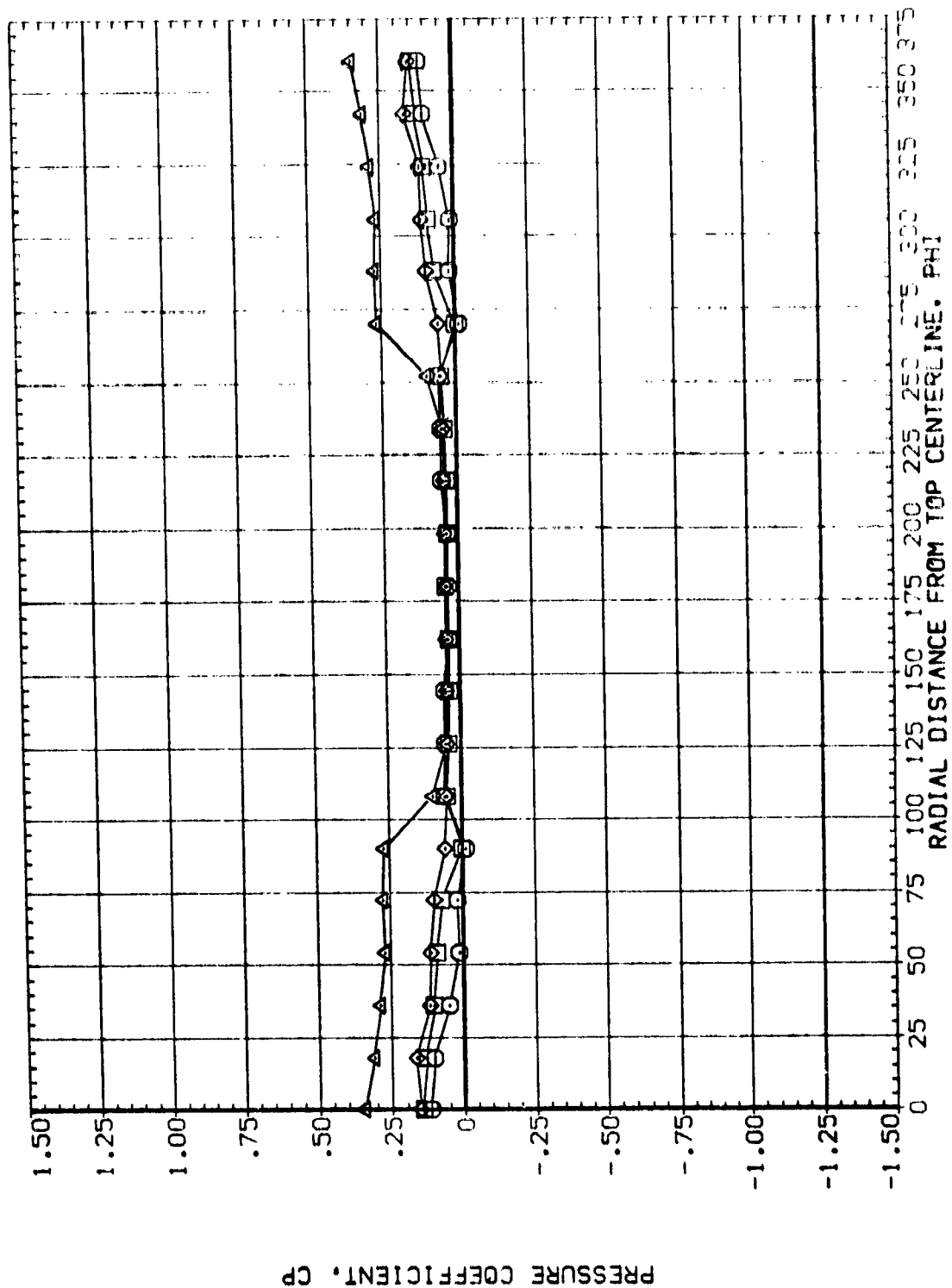
XVLT .708  
 .776  
 .844  
 .912

ALPHA 8.000  
 MACH 1.960

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

BETA .000  
 DELTAZ .140  
 N-SRB .000

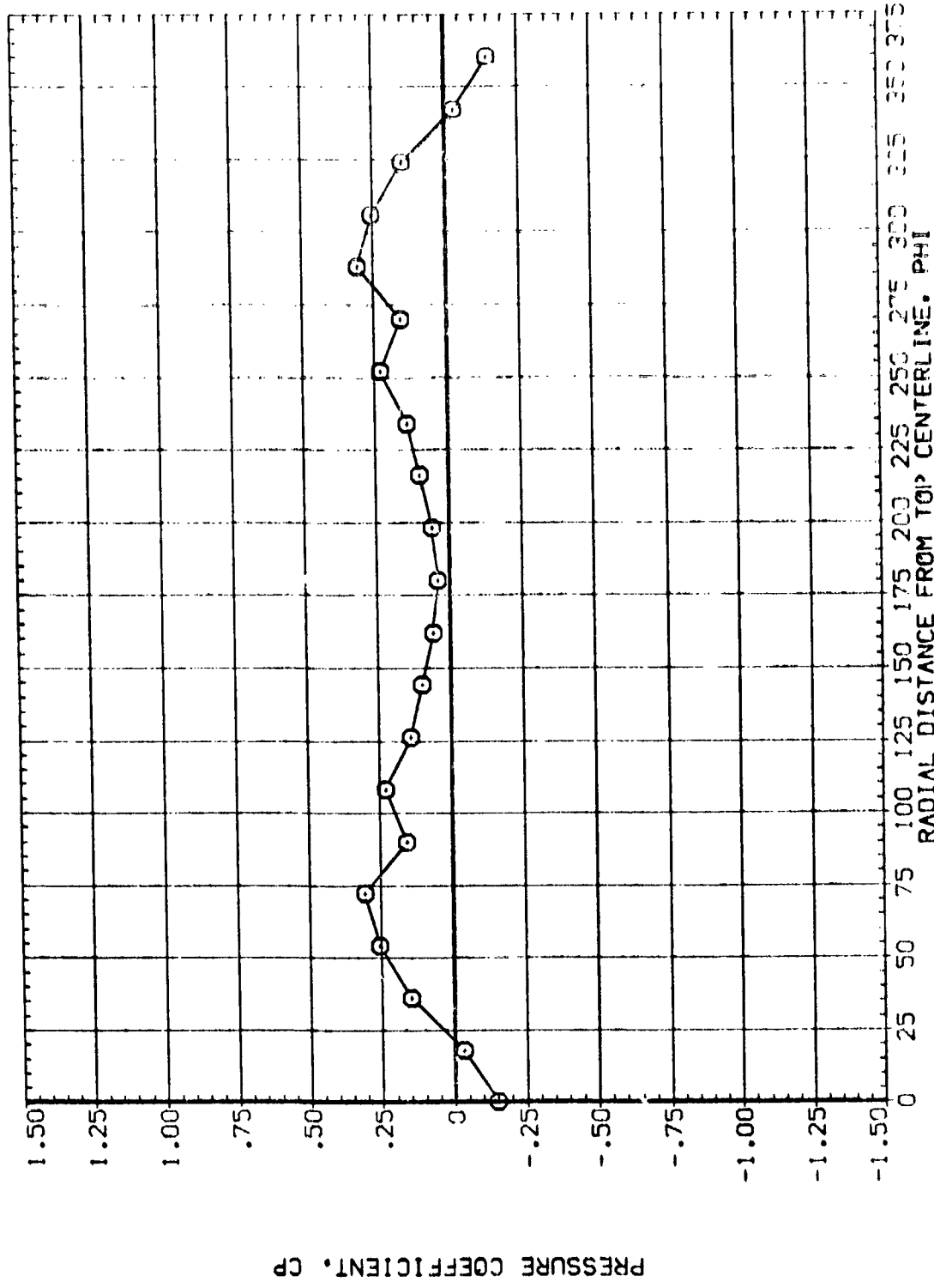
PARAMETRIC VALUES  
 CONFIS .000  
 RUDDER .000  
 DBRINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A92T01)

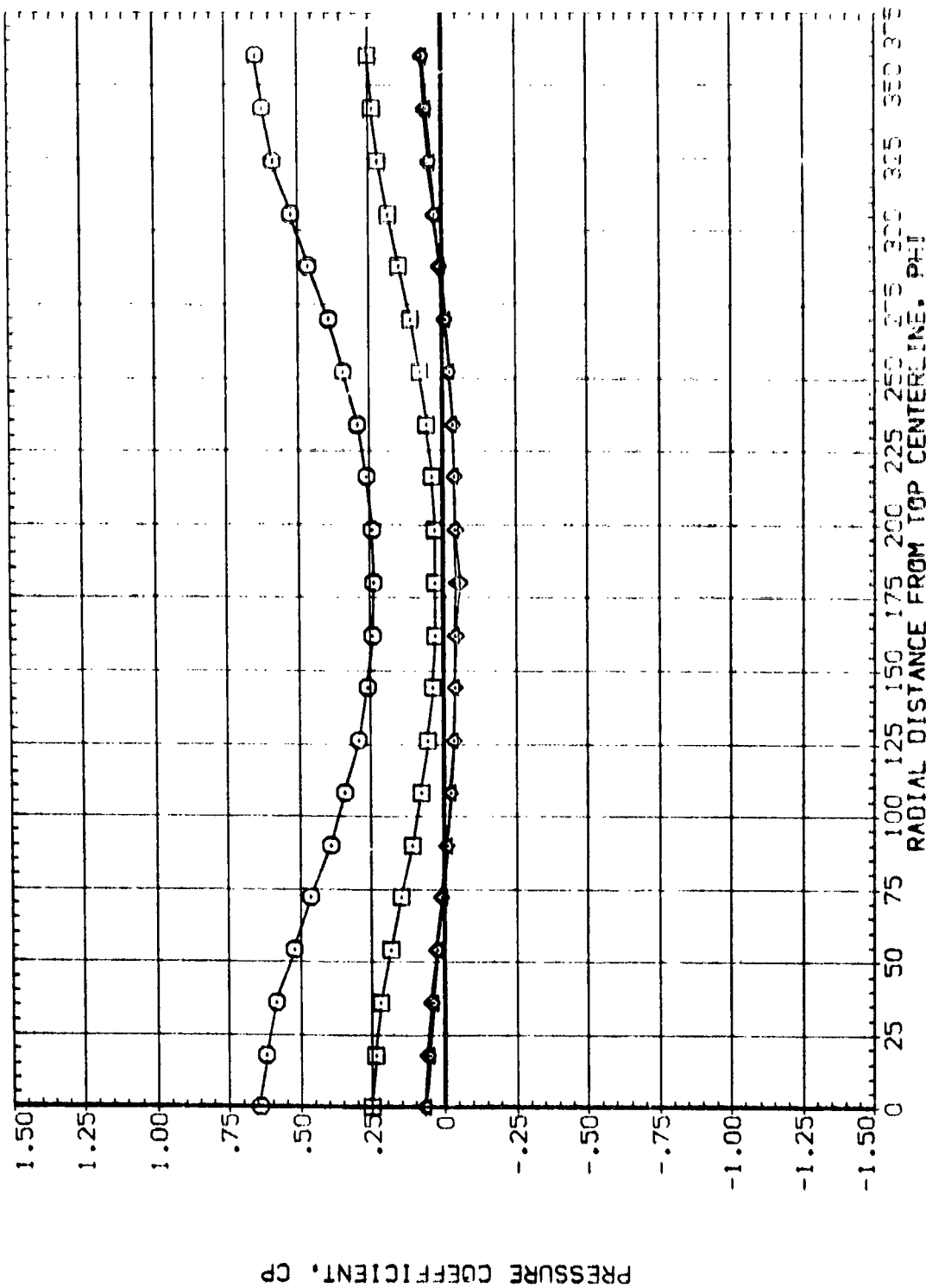
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
0	.984	8.000	1.960	SREF 6.198 LREF 5.313 BREF 5.313 XMRP 2.549 YMRP .000 ZMRP .000	BETA .000 DELTAZ .140 V-SRB .000 CONFIS .000 RUBBER .000 P-3-NC .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A92100)

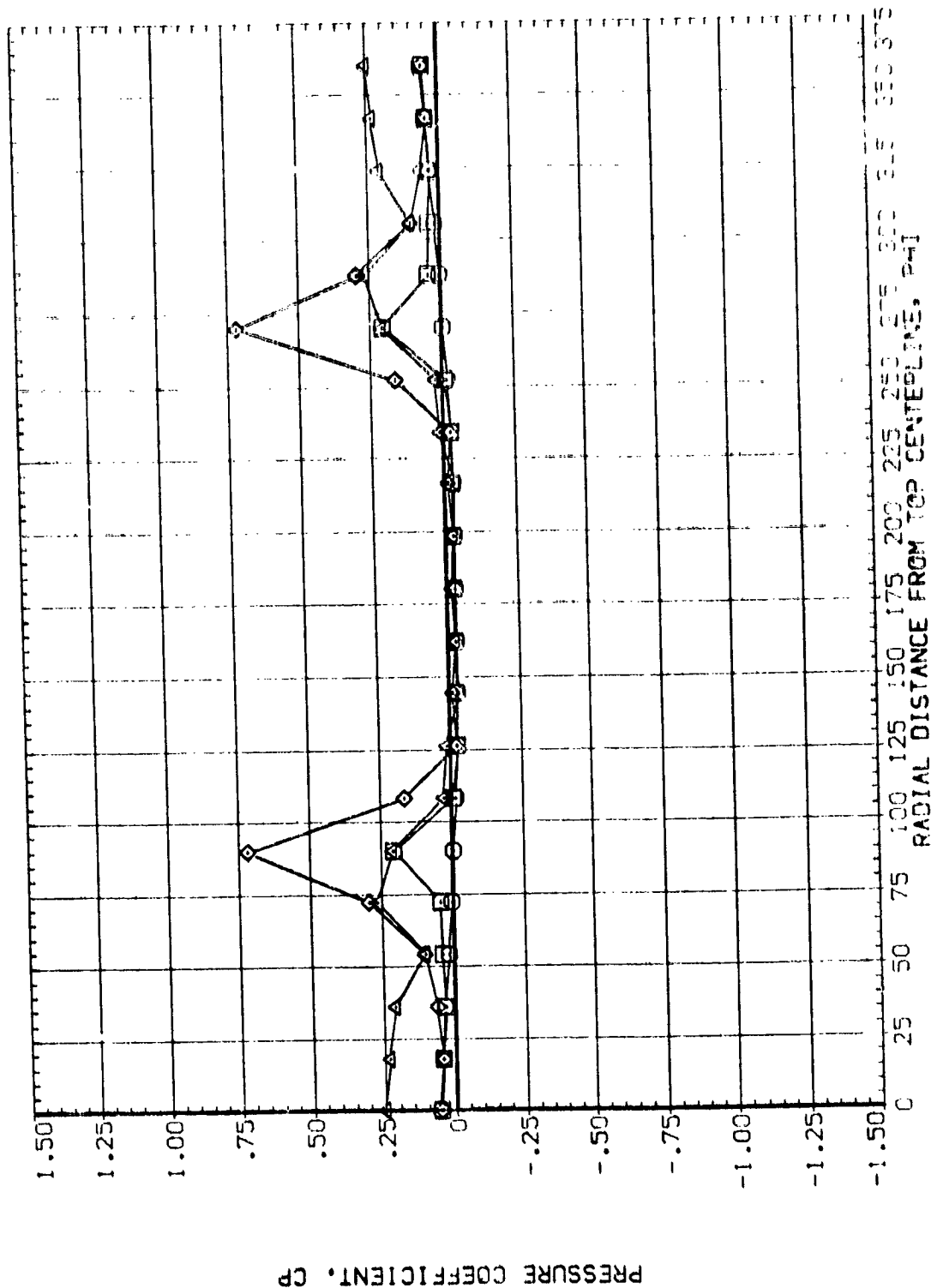
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	BETA	DELTA Z
○	.076	-8.000	3.500	6.198	5.313	5.313	2.549	1.000	1.000	.000	.000
□	.156									.140	.000
△	.235									.300	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 33 EXTERNAL TANK (A82T01)

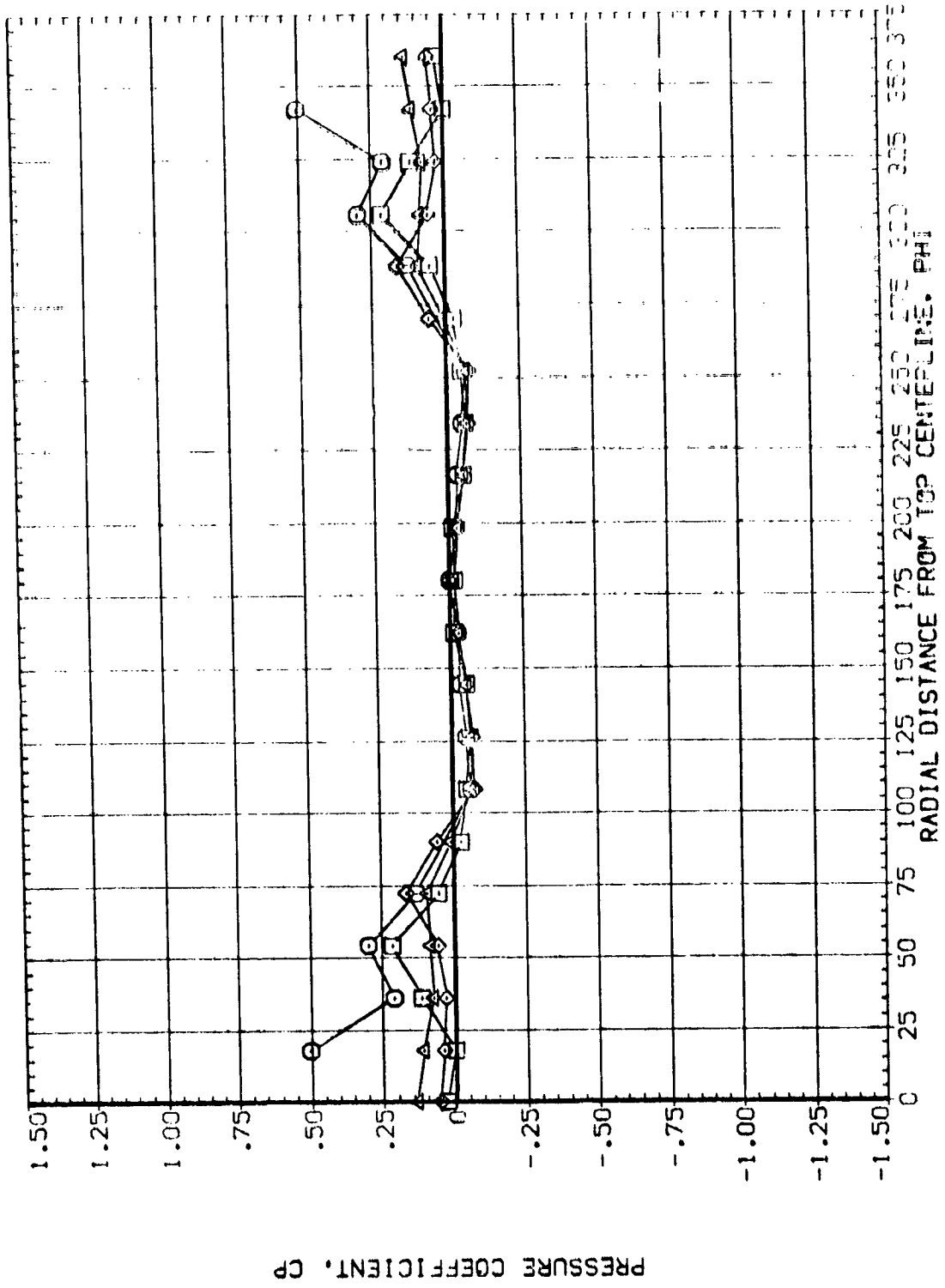
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SG-IN.	BETA	CONFID	
□	.271	-8.000	3.500	6.199	5.313	5.313	2.549	IN.	DELTA	.000	90.000
◇	.314							IN.	DELTA	.000	100
△	.350							IN.	DELTA	.000	500
▽	.382							IN.	DELTA	.000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 33

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK 1621019

SYMBOL	K/LT	ALPHA	MACH	REFERENCE DATA		PARAMETER VALUES	
				SREF	SC.IN.	BETA	DELTA
○	.438	-8.000	3.500	5.313	IN.	1.000	1.000
□	.506			5.313	IN.	1.000	1.000
△	.573			2.549	IN.	1.000	1.000
▽	.641			1.000	IN.	1.000	1.000



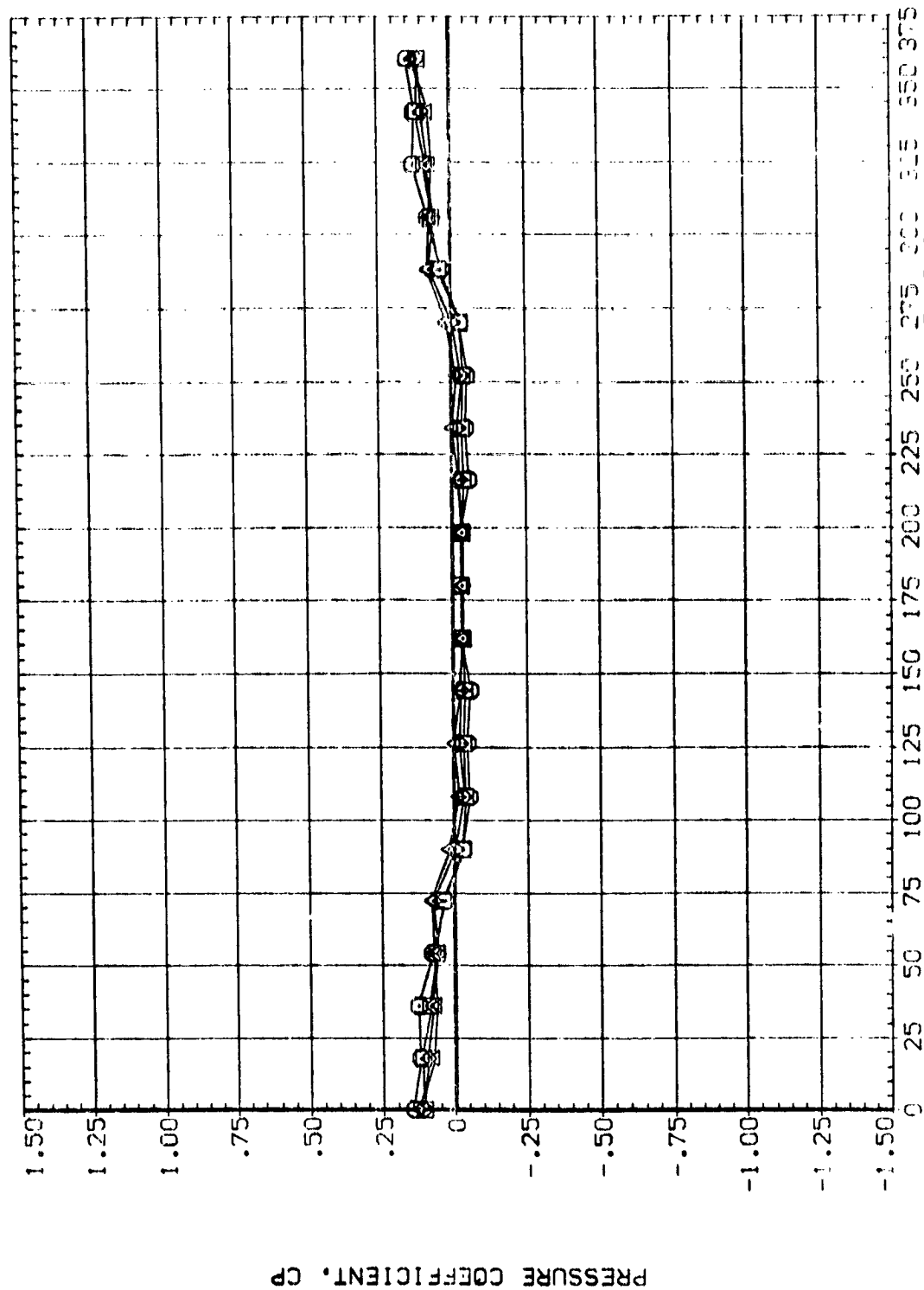
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T9:1)

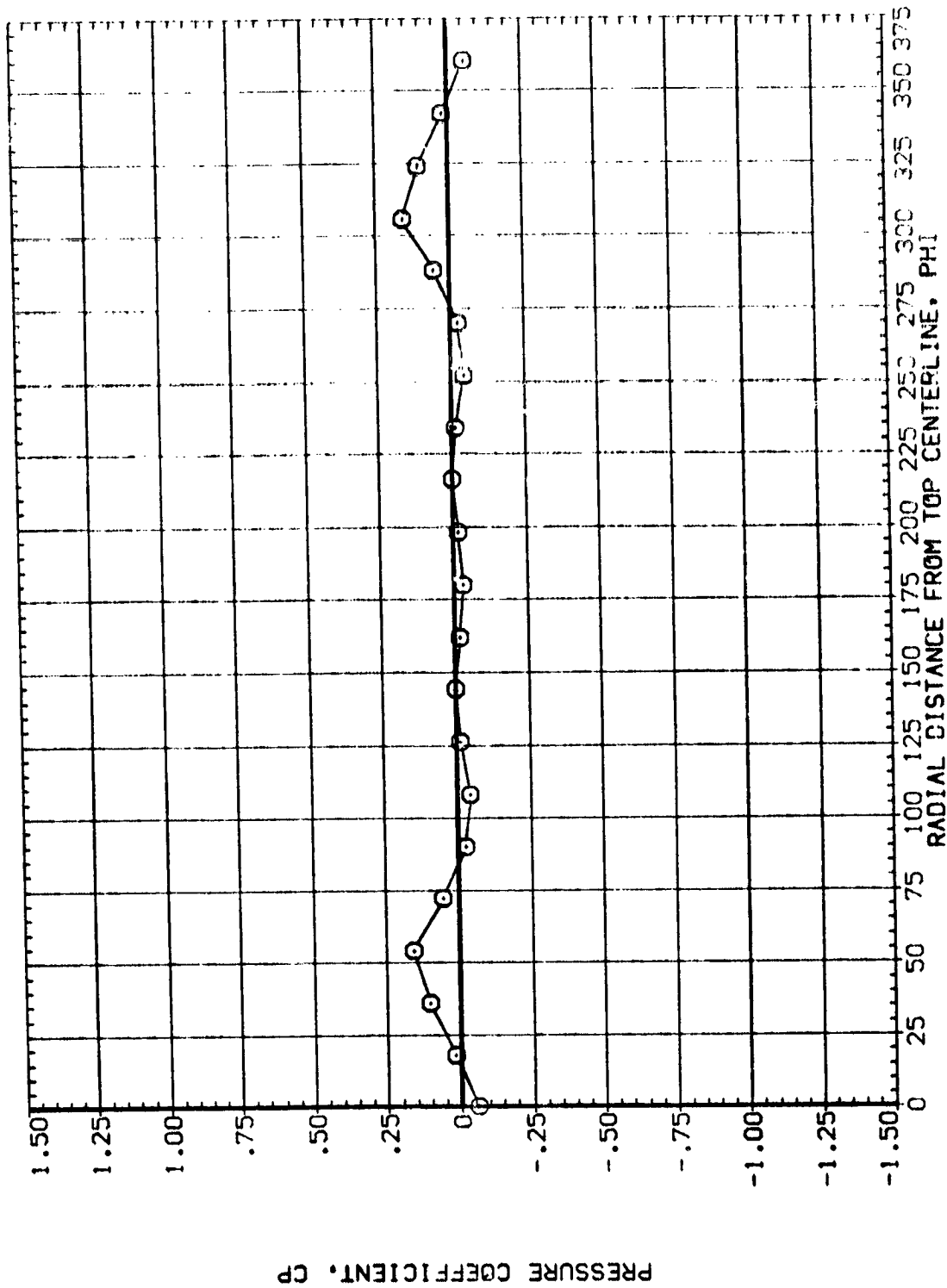
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	BEYA	CONFIS	50.000
◇	.708	-8.000	3.500	6.198	DELTAZ	RUDER	.000
◇	.776			5.313	X-S06	ORBITAL	.000
◇	.844			2.549			.500
◇	.912			.000			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

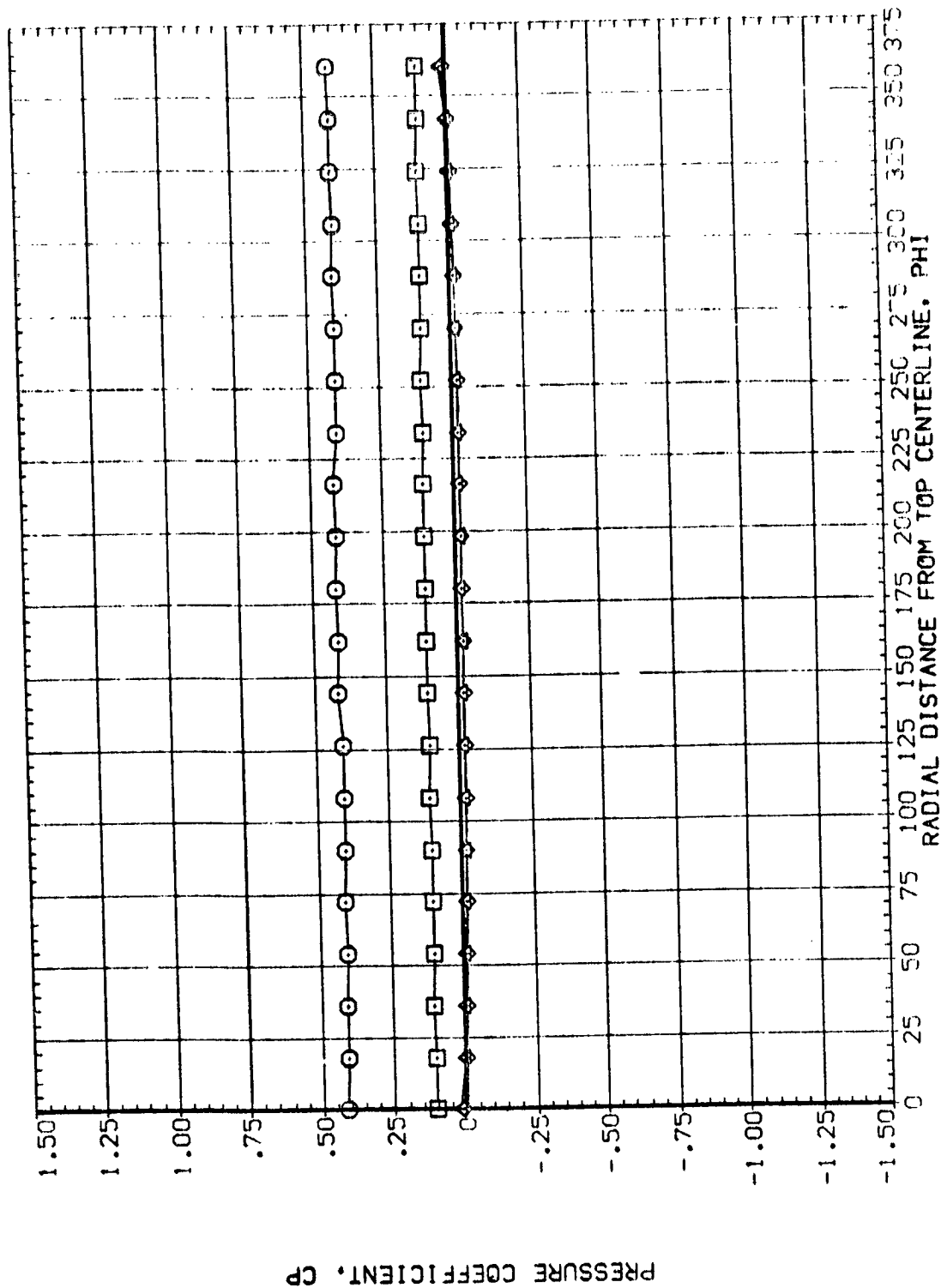
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
0	.984	-8.000	3.500	SREF 6.198 LREF 5.313 BREF 5.313 YMRP 2.549 ZMRP .000	DELTA Z X-SRB	0.000 0.40 0.00 0.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T01)

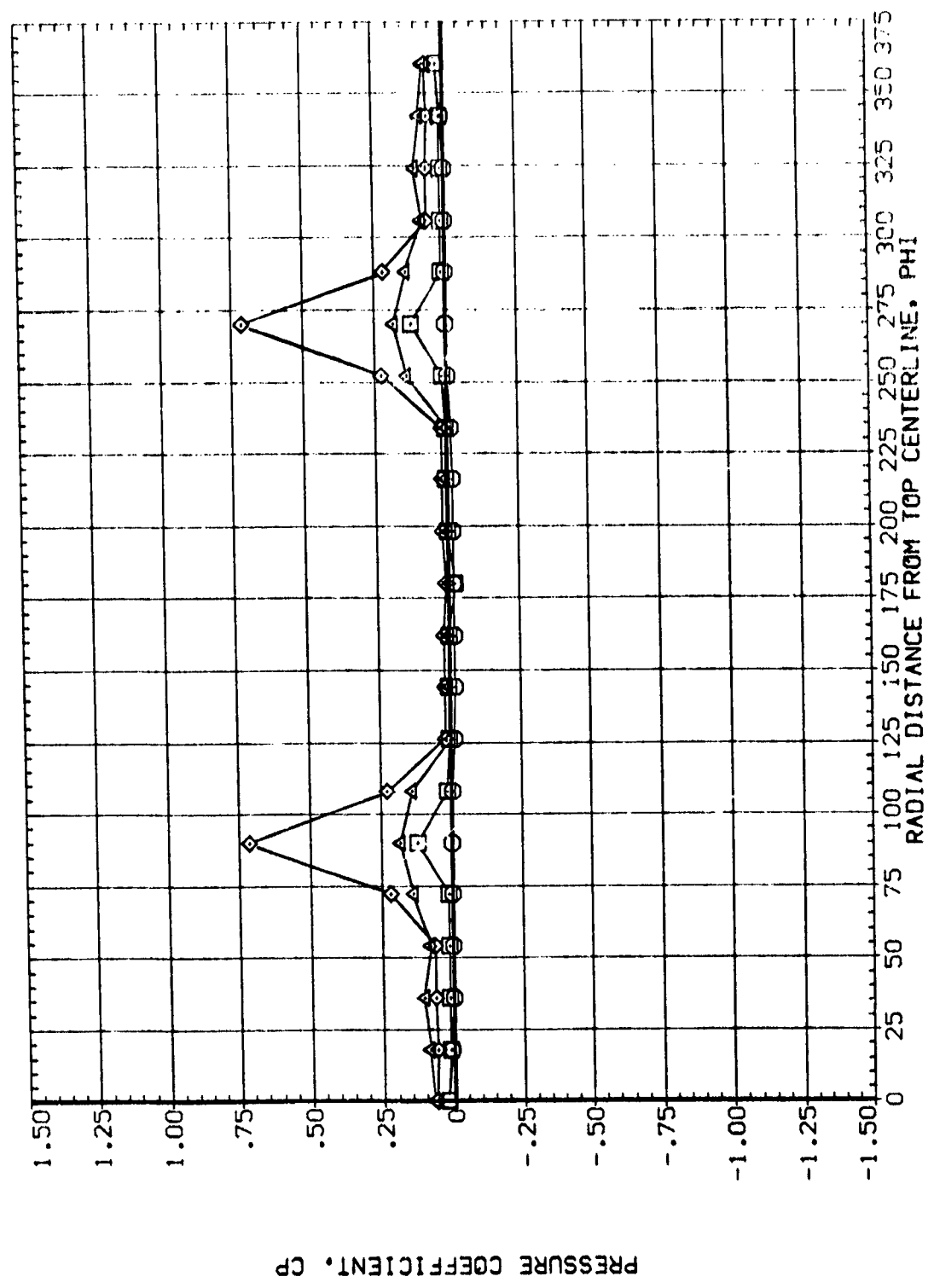
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	X/LT	ALPHA	MACH	BETA	CONFIS	90.000
◇	.076	.000	3.500	DELTAZ	.140	.000
□	.155			X-SRB	.000	.500
△	.220					
▽	.235					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

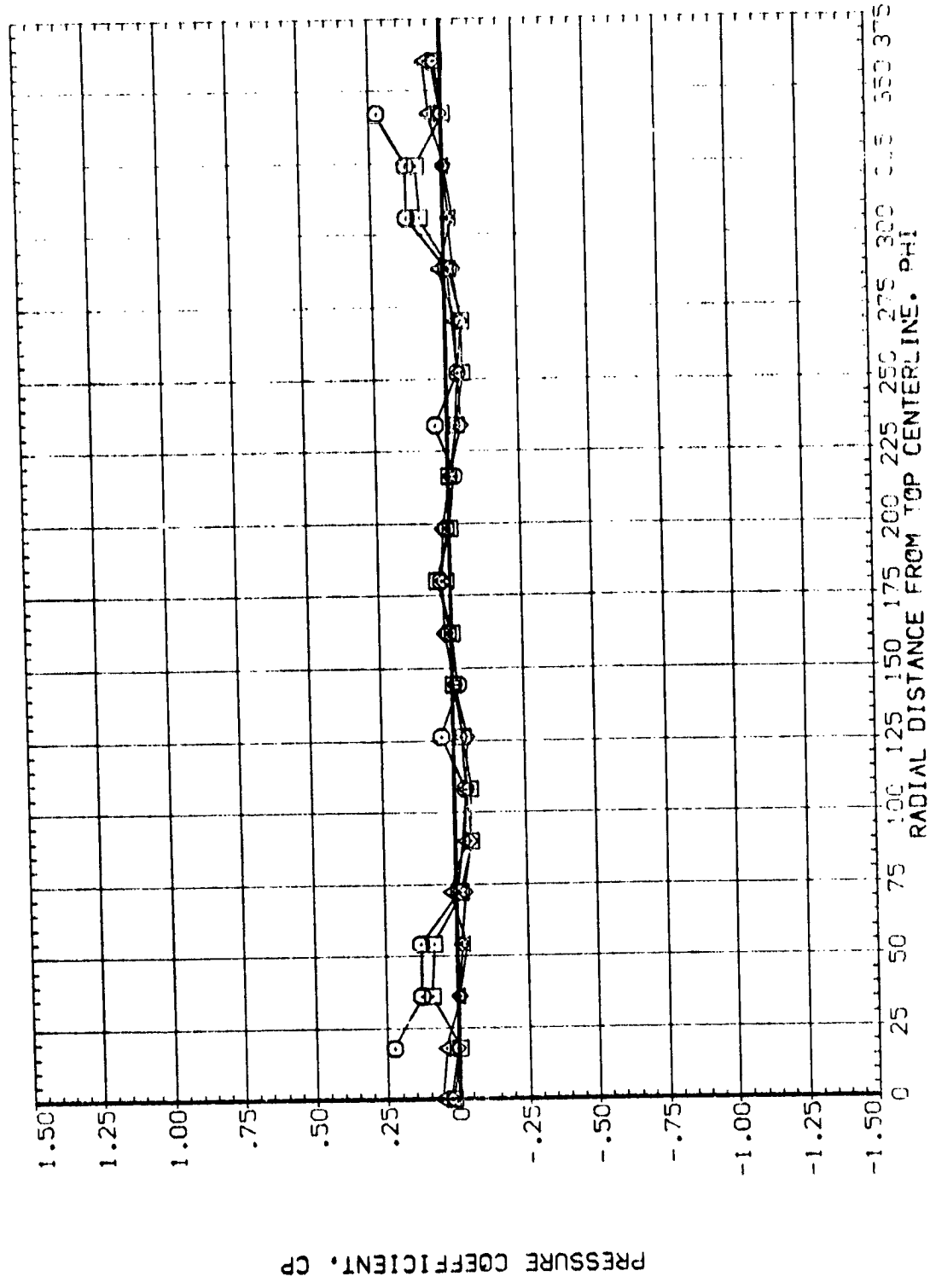
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		BETA		PARAMETRIC VALUES	
				SPEF	SO. IN.	DELTA Z	CONFUS	CLIFFUS	CONFUS
○	.271	.000	3.500	LREF	5.313	IN.	.000	.140	.000
□	.314			BREF	5.313	IN.	.000	.000	.000
◇	.350			YMRP	2.549	IN.	.000	.000	.500
△	.382			ZMRP	.000	IN.	.000	.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T01)

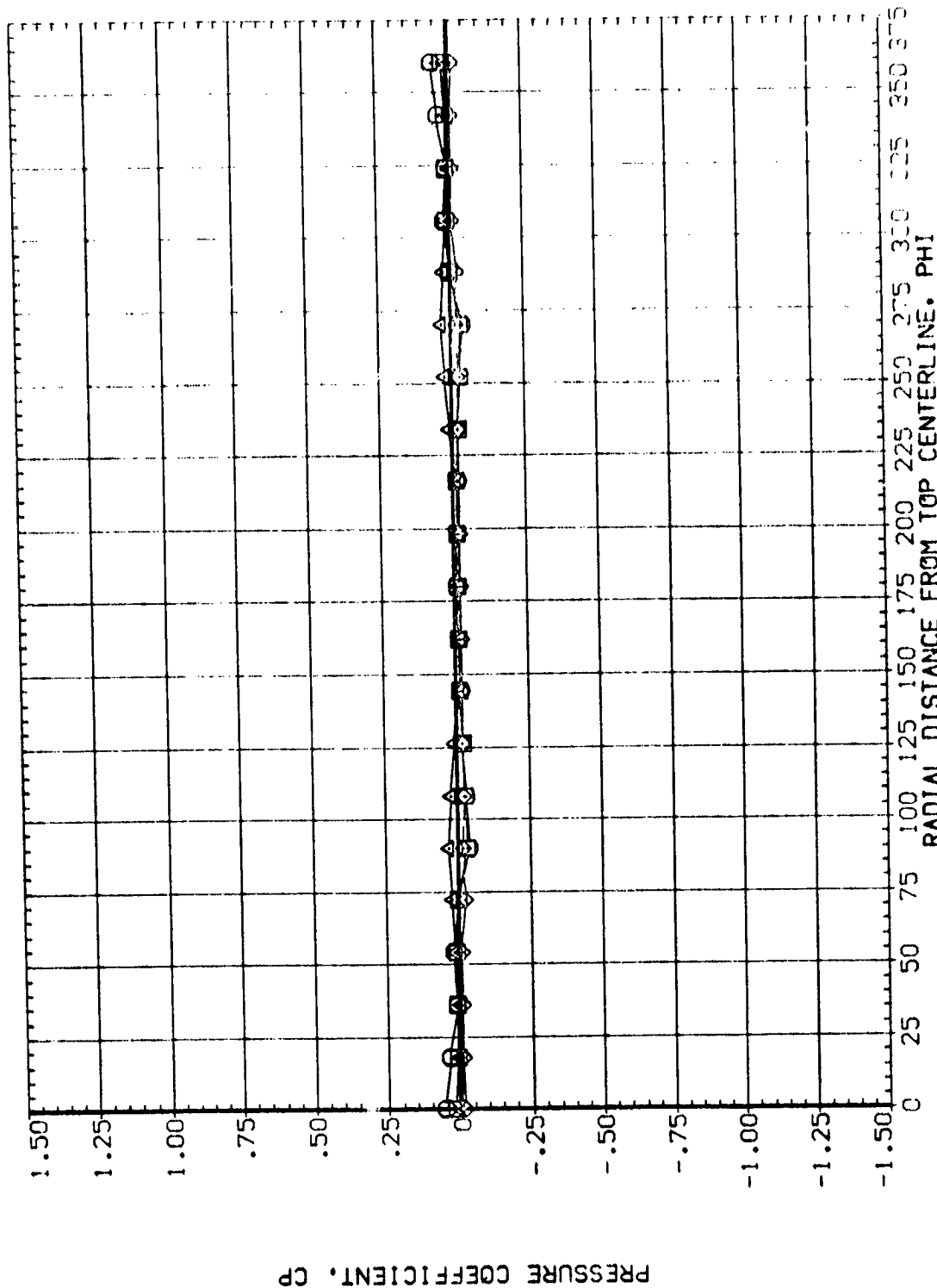
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	6.198	50. IN.	BETA	EDFIS	90.000
○	.438	.000	3.500	LREF	5.313	IN.	DELTAZ	.14C	.000
□	.506			BREF	5.313	IN.	X-SRB	.000	.500
△	.573			XMRP	2.549	IN.			
▽	.641			ZMRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A827010)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SO. IN.	BETA	CONFIS	90.000
□	.708	.000	3.500	LREF	5.313	DELTAZ	.000	.000
◇	.776			BREF	5.313	Y-S98	.140	.000
△	.844			XMRP	2.549		.000	.500
	.912			ZMRP	.000			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

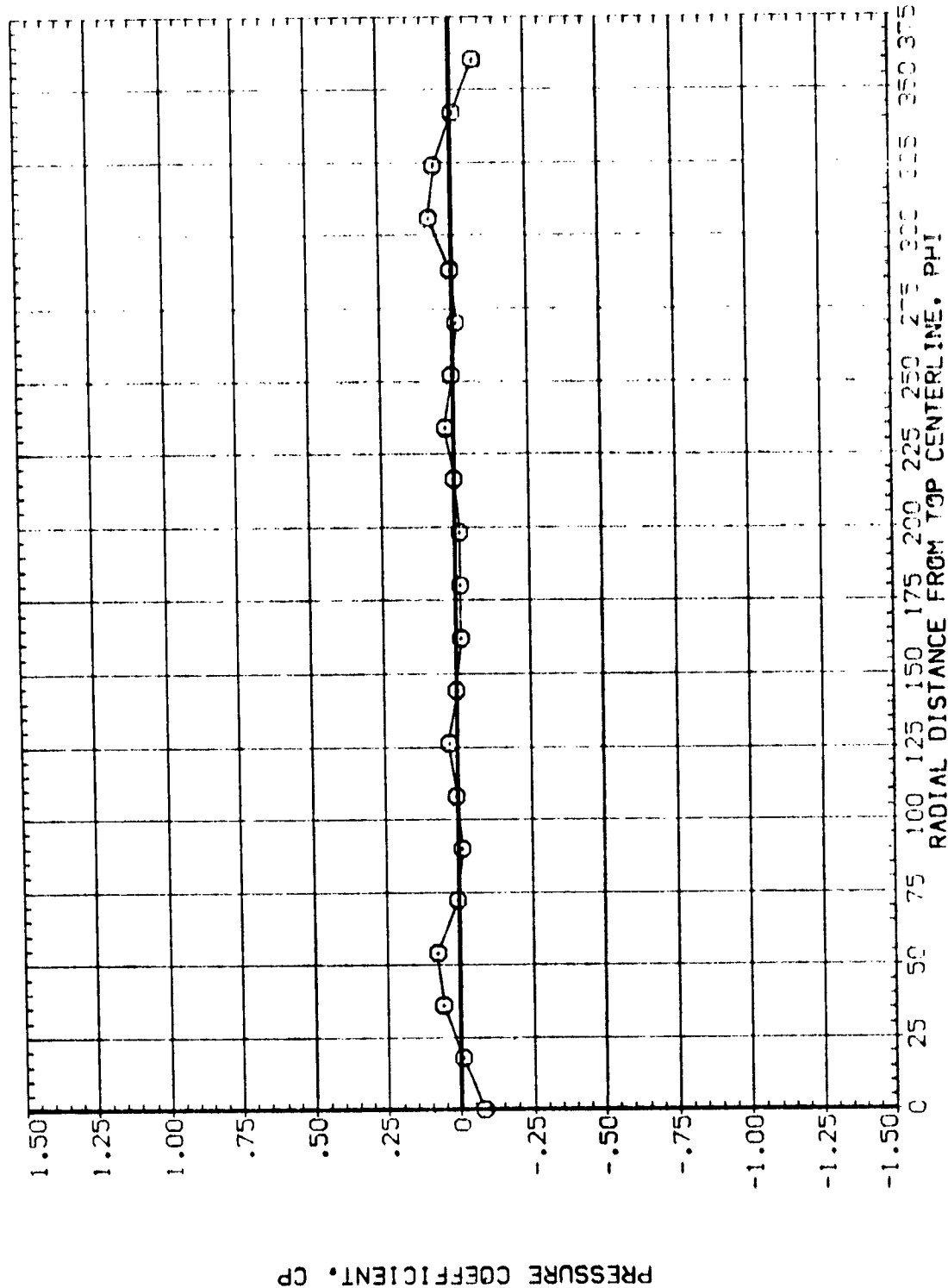
**SYMBOL** 

X/LT	ALPHA	MACH
.984	.000	3.500

REFERENCE DATA	
SREF	6.198 SQ. IN.
LREF	5.313 IN.
3REF	5.313 IN.
XMRP	2.549 IN.
YMRP	.000 IN.
ZMRP	.000 IN.

PARAMETRIC VALUES

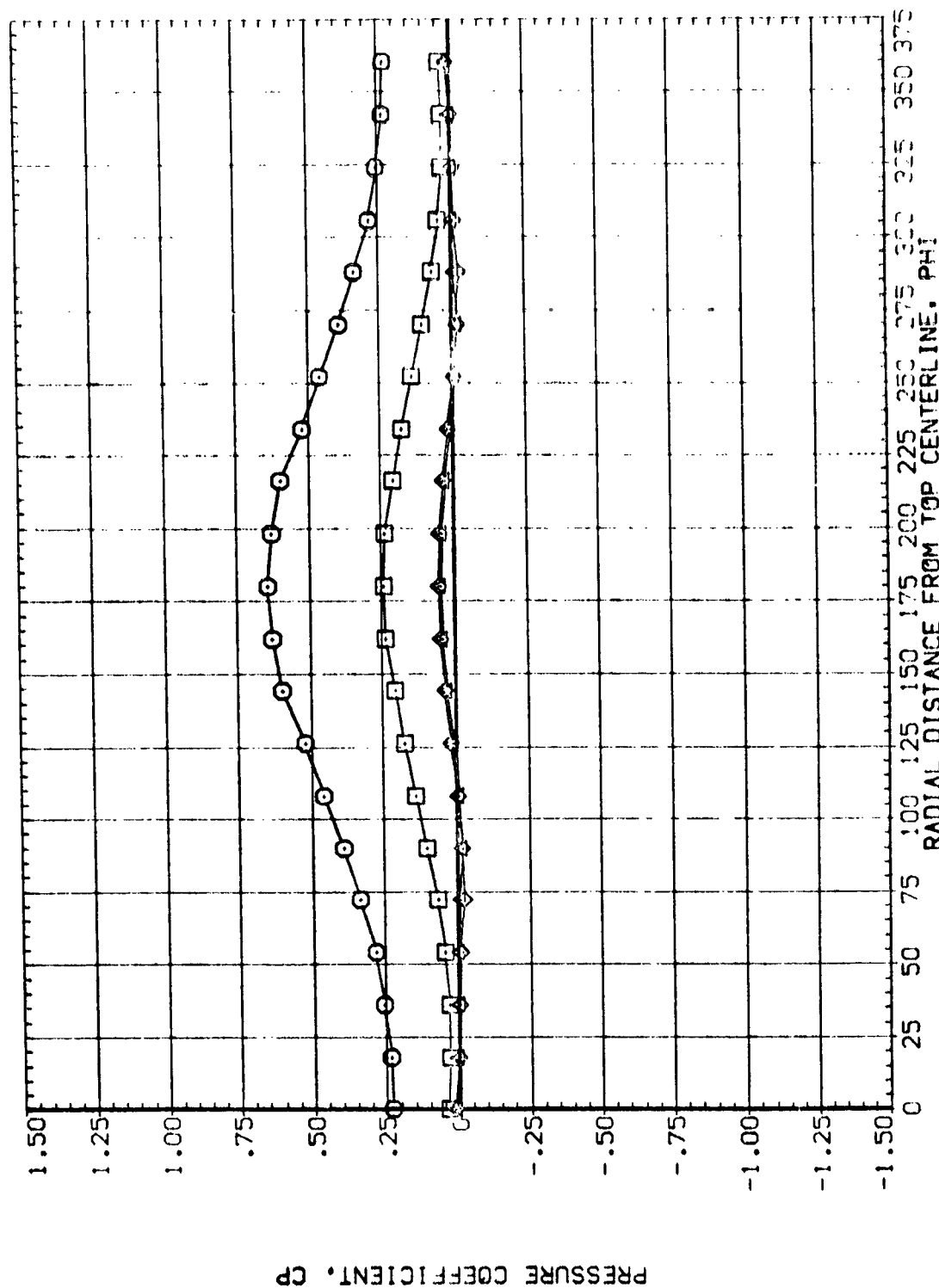
0007-35



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK TO S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82700)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	BETA	COF. IS
□	.076	8.000	3.500	LREF	6.198	DELTA Z	90.000
◇	.155			BREF	5.313	Y-598	100.000
△	.220			XMRD	2.549		100.000
▽	.235			VMRD	.000		100.000
				ZMRD	.000		100.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK TO S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82701)

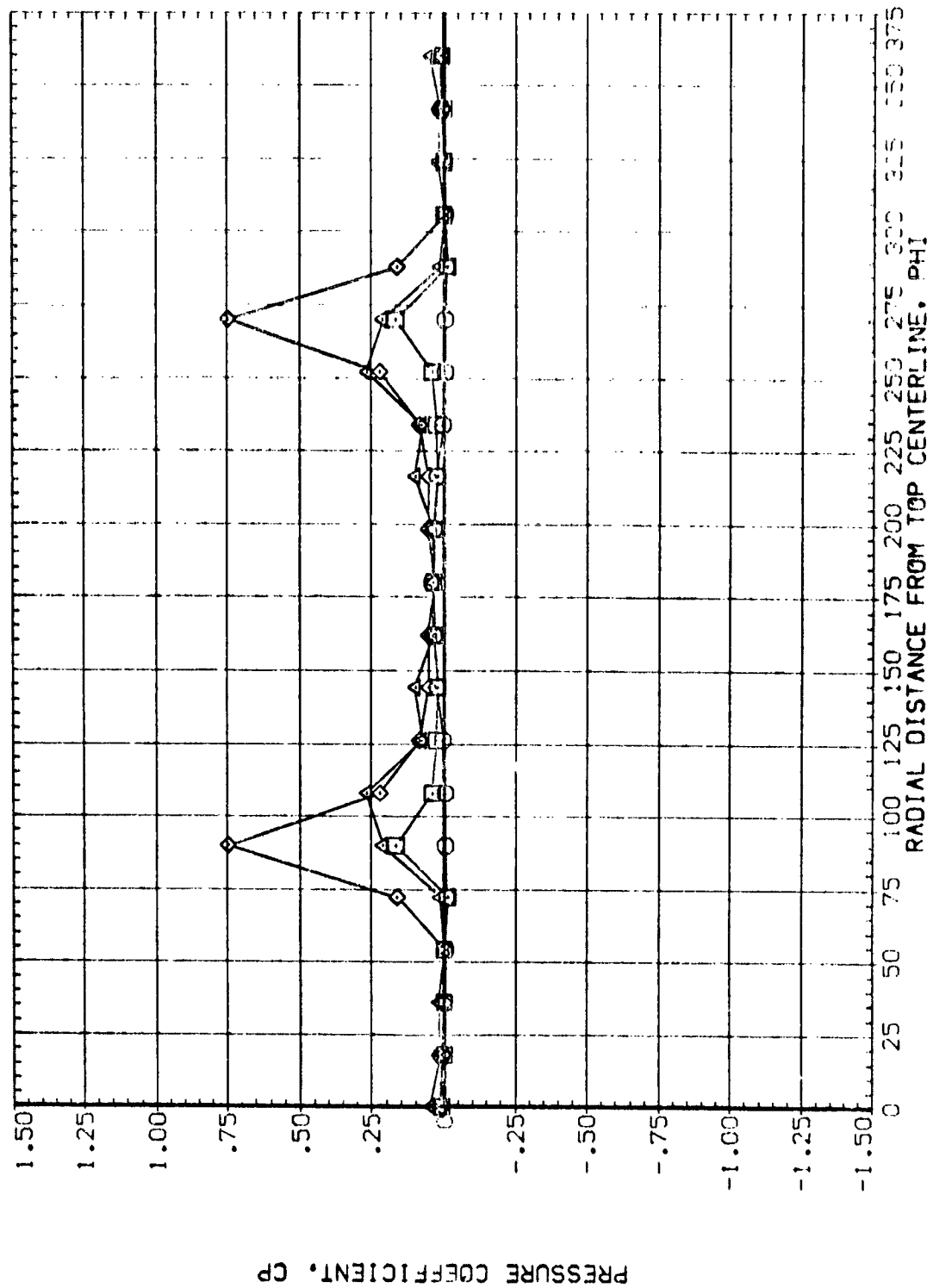
SYMBOL

X/LT ALPHA MACH  
 .271 8.000 3.500  
 .314  
 .350  
 .382

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.548  
 YMRP .000  
 ZMRP .000

SO. IN. IN. IN. IN.  
 .000 .000 .000 .000  
 .140 .000 .000 .000  
 .000 .000 .000 .000  
 .000 .000 .000 .000

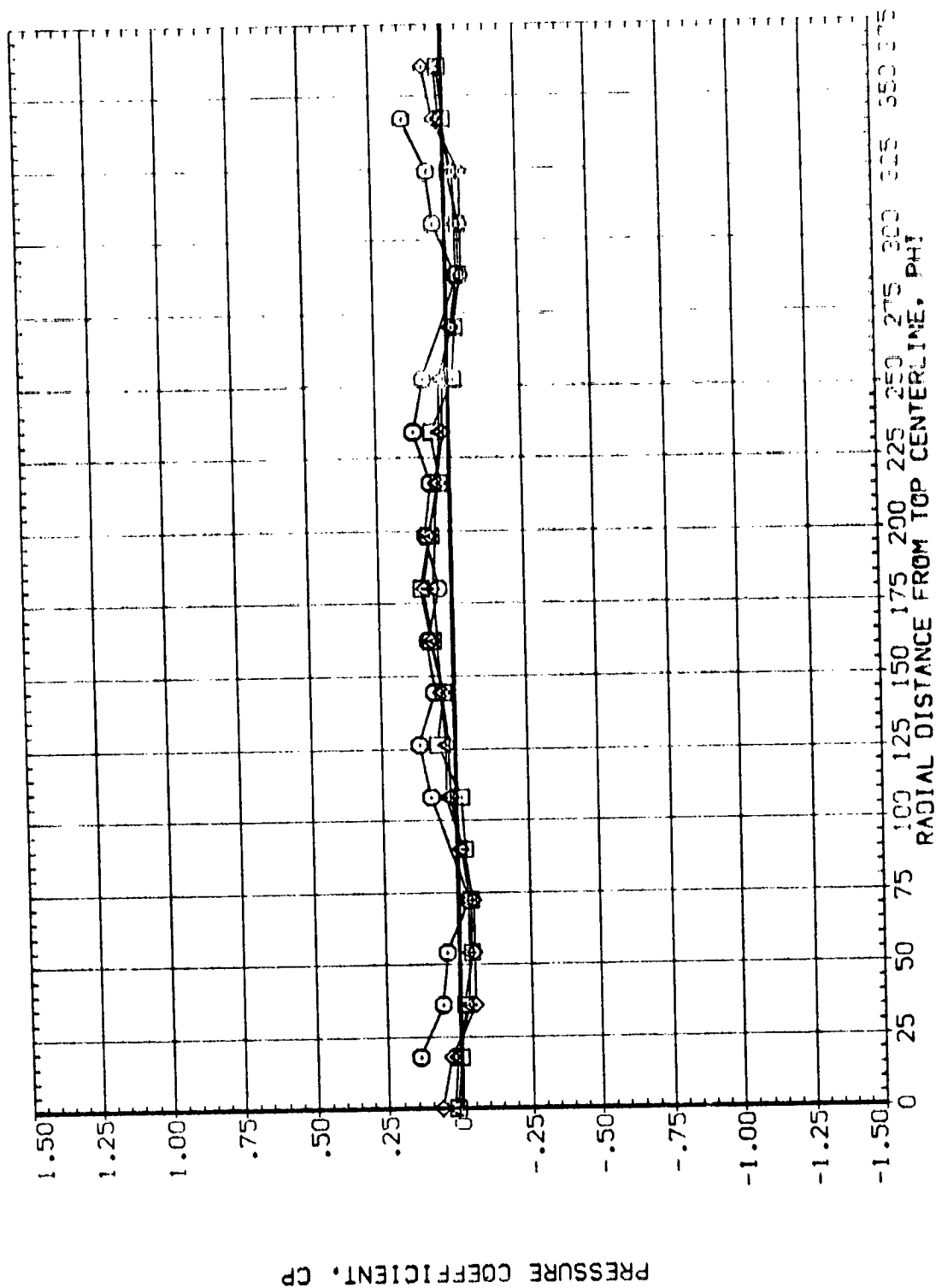
PARAMETRIC VALUES  
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 .000 .000 .000 .000  
 .000 .000 .000 .000  
 .000 .000 .000 .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK CABE T010

SYMBOL		X/LT		ALPHA		MACH		REFERENCE DATA		BETA		PARAMETRIC VALUES	
◇		.438		8.000		3.500		SREF	6.198	50. IN.		.000	CONF TS
□		.506						LREF	5.313	IN.		.000	RUDES
◇		.573						BREF	5.313	IN.		.000	398 IN.
△		.641						YMRP	2.548	IN.		.000	
								ZMRP	.000	IN.		.000	

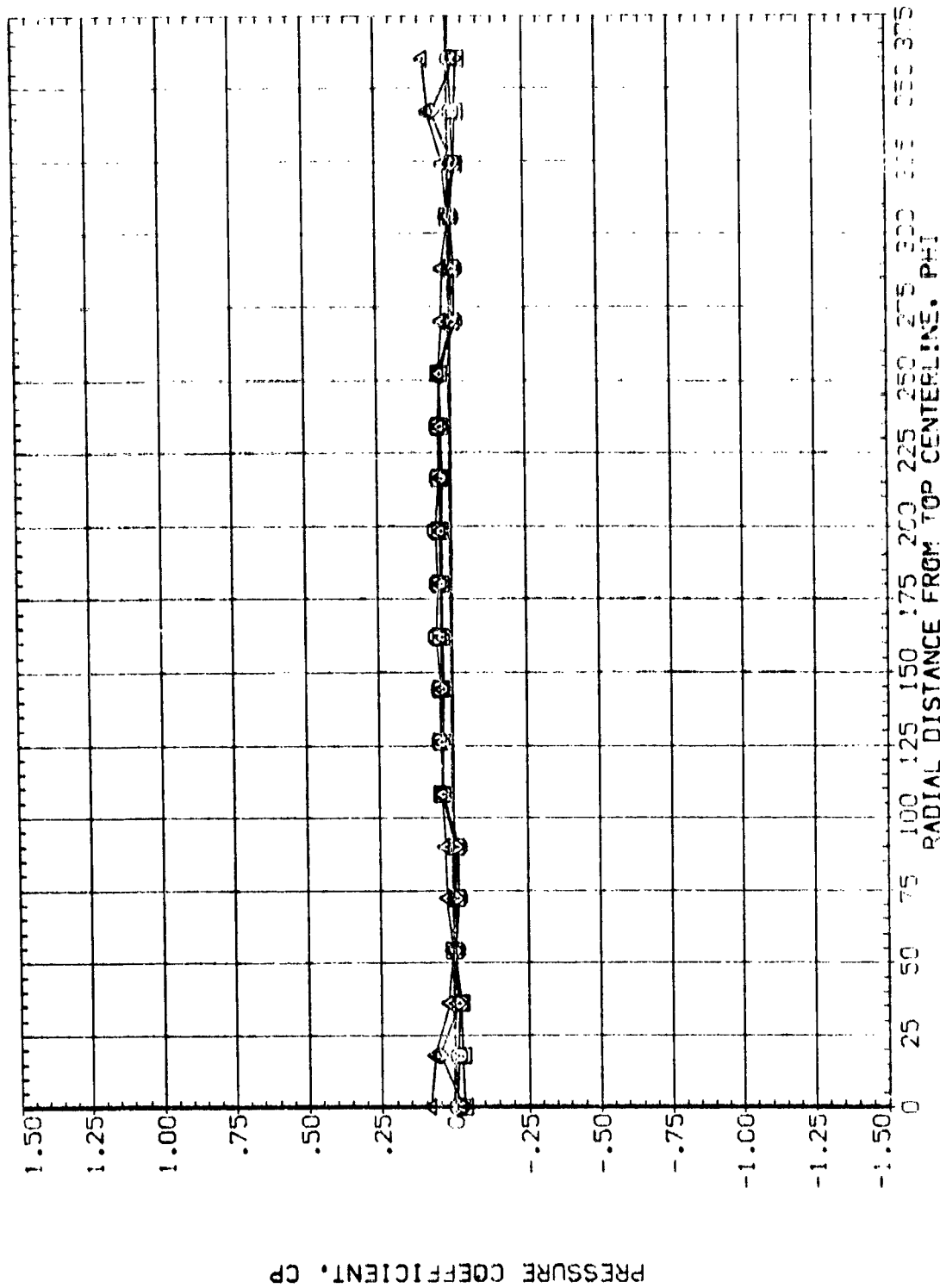


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (AB2101)

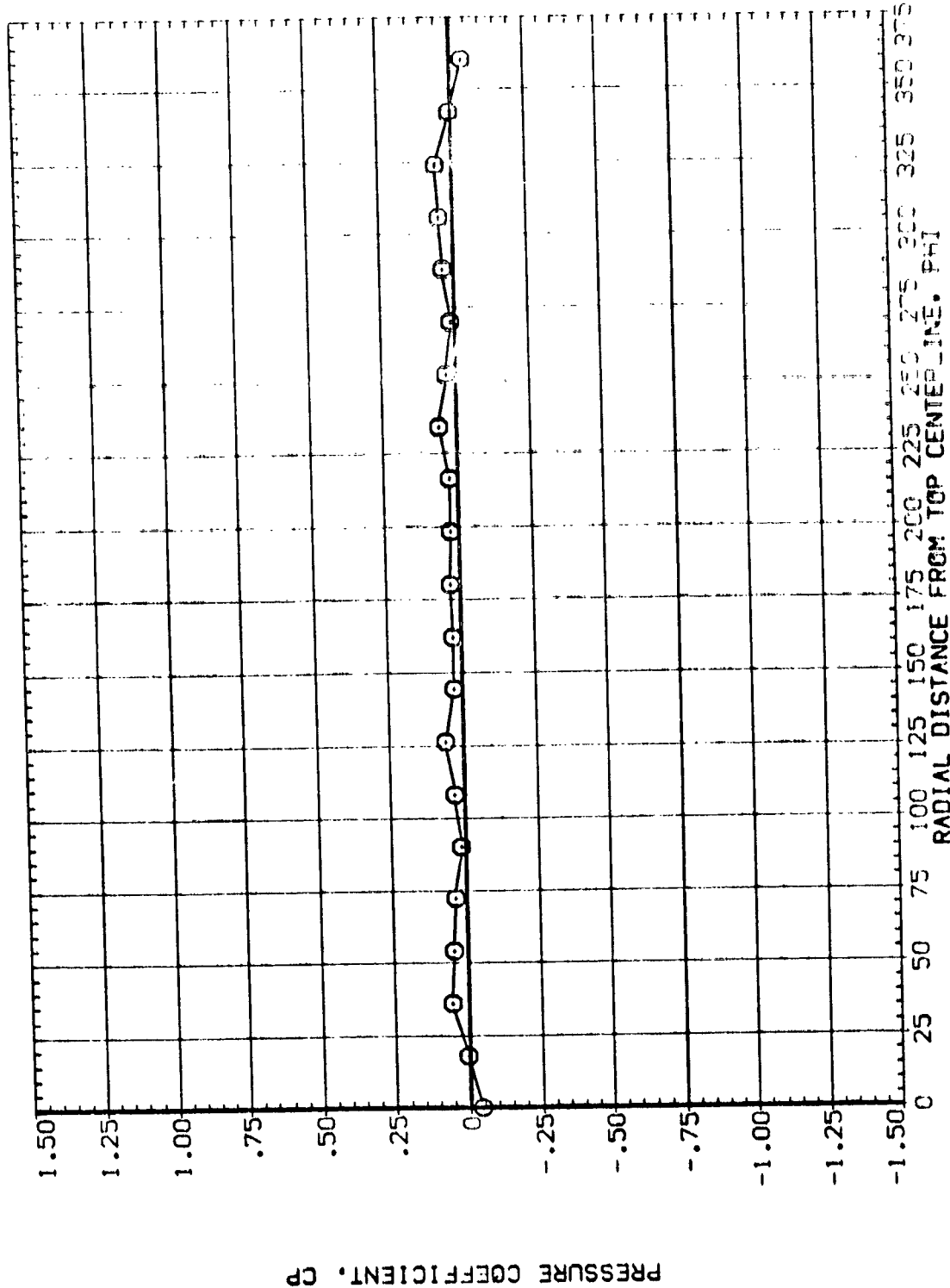
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SO IN.	BETA	CONFIS	
□	.708	8.000	3.500	LREF	5.313	DELTA Z	.000	.000
□	.776			BREF	5.313	X-SRB	.000	.500
△	.844			XMRP	2.548			
▽	.912			YMRP	.000			
				ZMRP	.000			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK 1A221000

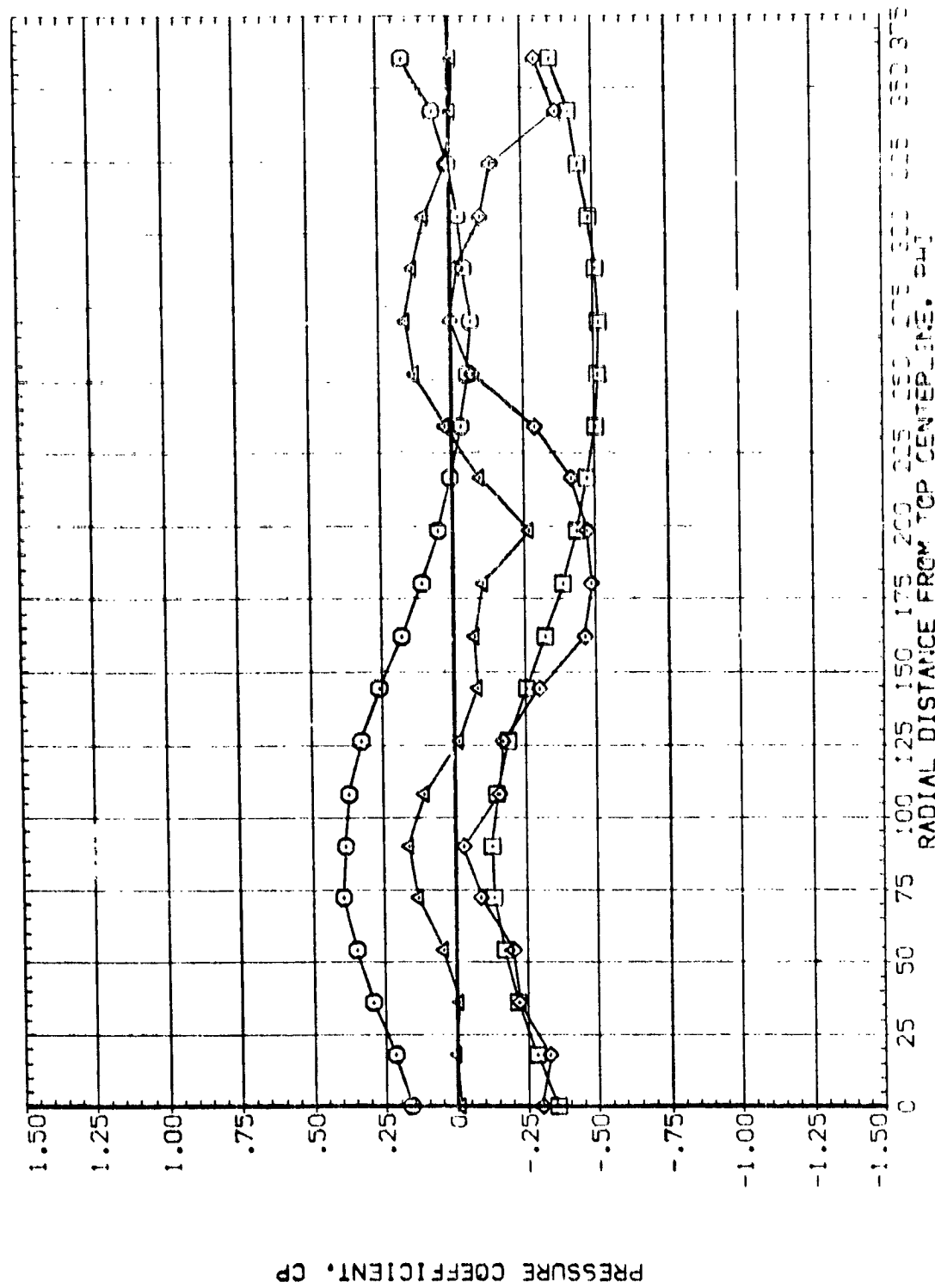
SIMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	BETA	GEOMETRIC VALUES
0	.904	8.000	3.500	SREF 6.198 LREF 5.313 BREF 5.313 XREF 2.542 YREF .000 ZREF .000	DELTA Z V-SRB	CONFIG RUDER POSING
				50 IN. IN. IN. IN. IN. IN.		90.000 1.000 1.000 1.000 1.000 1.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 C3 EXTERNAL TANK C462T023

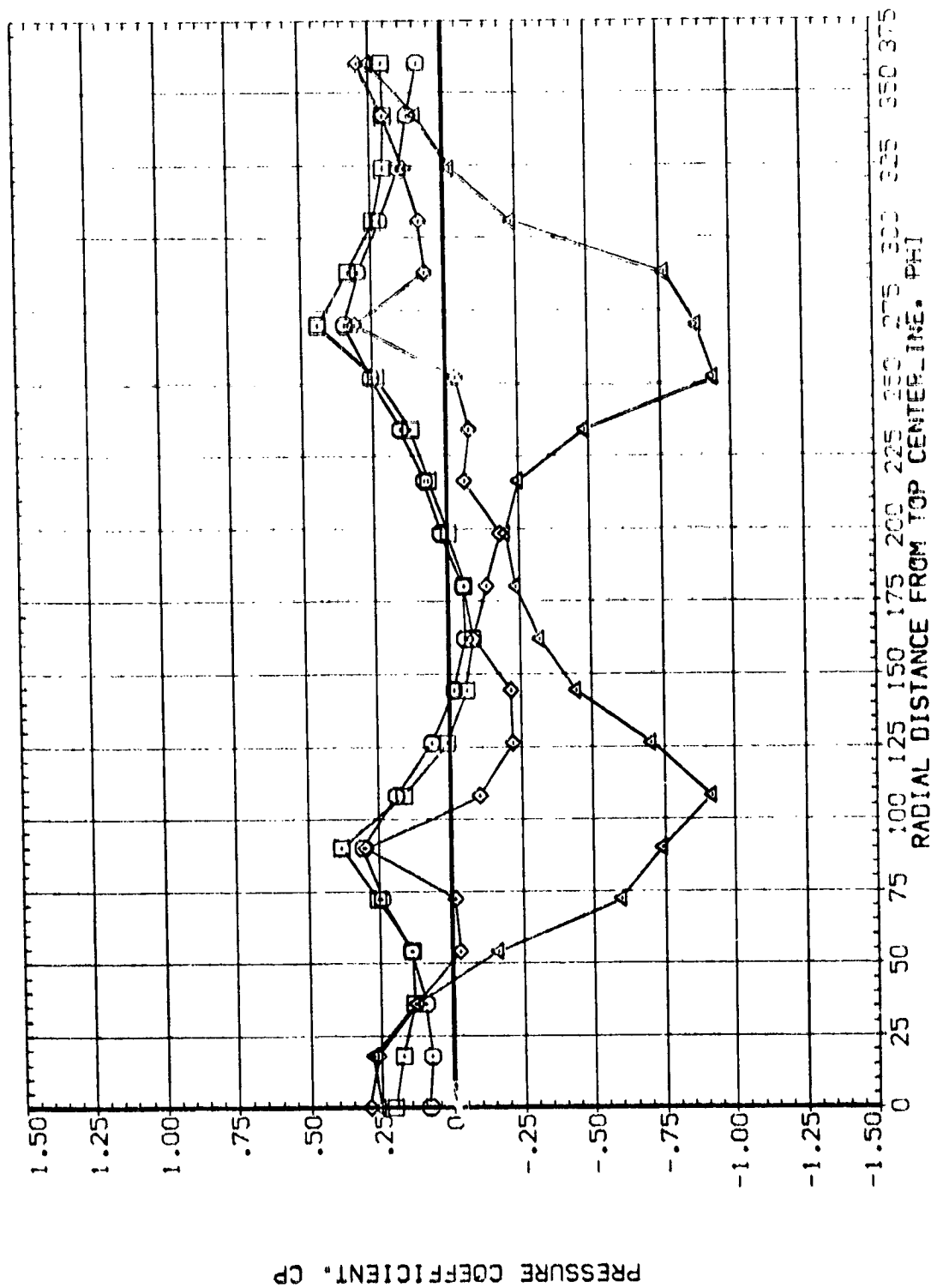
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PERMITS VALUES
◇	.076	-8.000	.900	SREF 6.198	50.000
□	.155			LREF 5.313	100.000
◇	.220			BREF 5.313	100.000
◇	.235			YREF 2.549	100.000
				YREF 1.000	100.000
				ZREF 1.000	100.000
				DELTA 1-508	100.000
				DELTA 1-508	100.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 C3

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A22102)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		GEOMETRIC VALUES	
				SREF	ALPHA	REF	REF
◇	.271	-8.000	.900	6.199	0.000	0.000	0.000
□	.314			5.313	0.000	0.000	0.000
◇	.350			5.313	0.000	0.000	0.000
◇	.382			2.549	0.000	0.000	0.000
				1.000	0.000	0.000	0.000
				1.000	0.000	0.000	0.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .438  
 .506  
 .573  
 .641

BETA -8.000

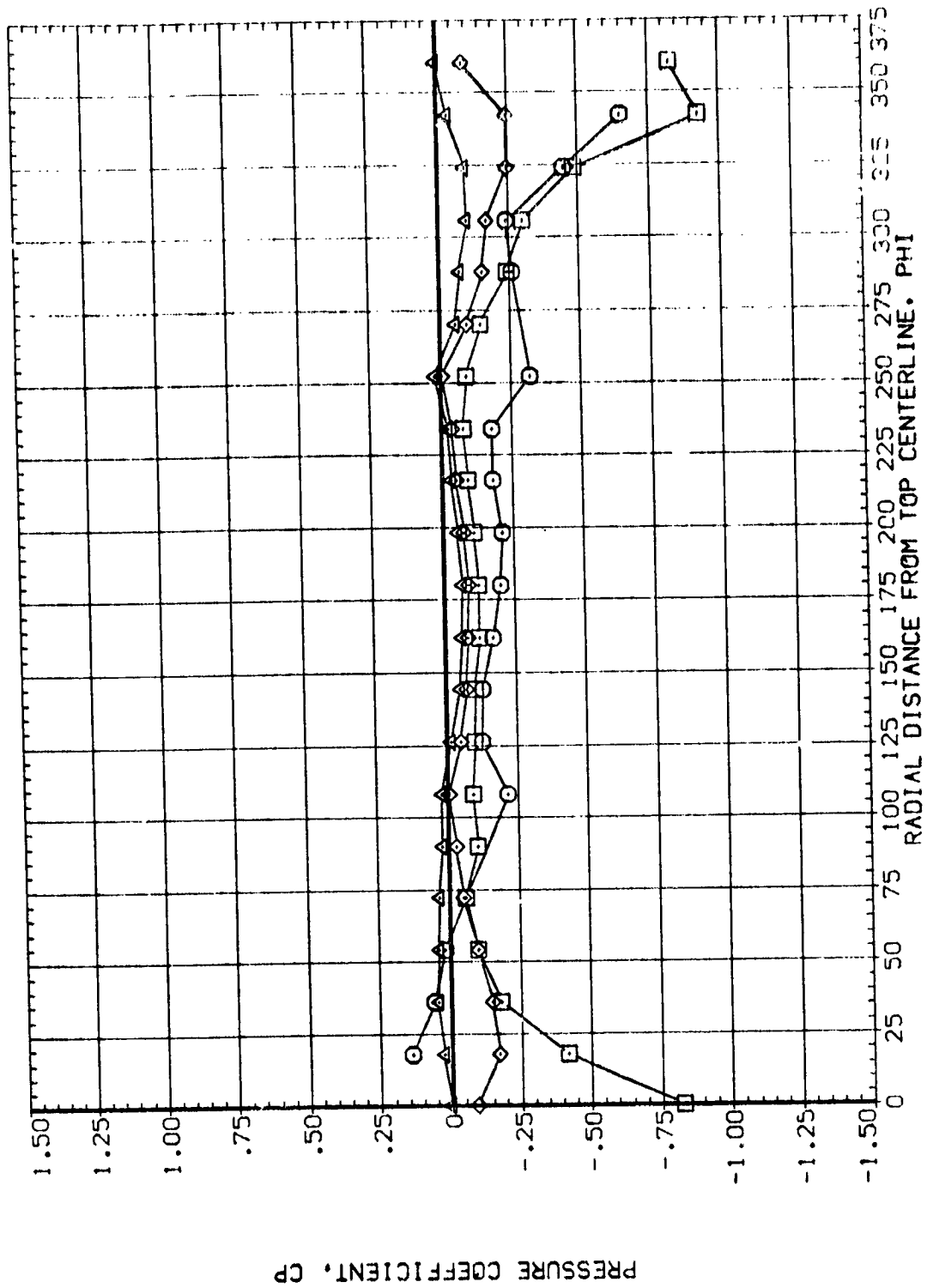
MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREI 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

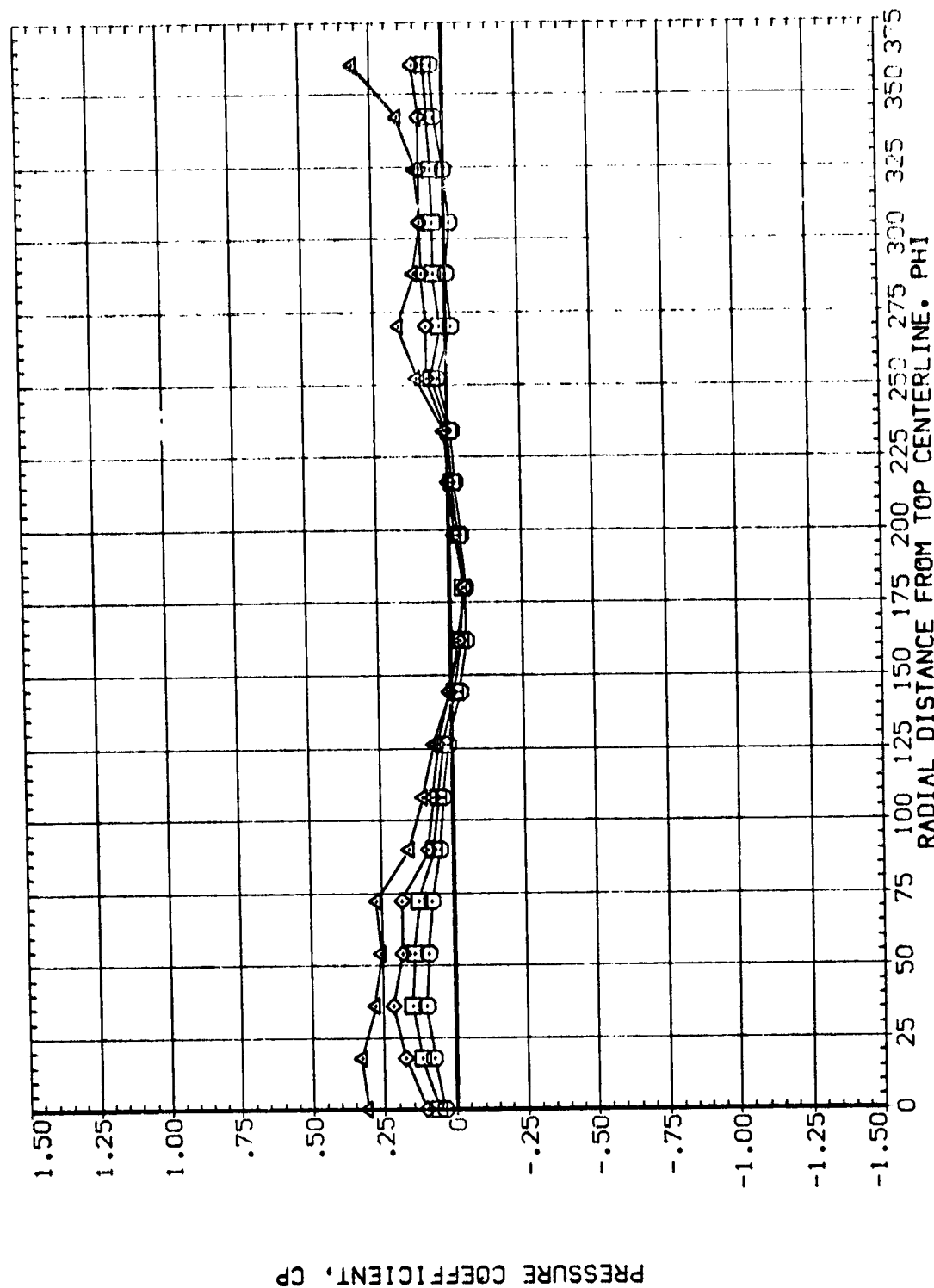
PARAMETRIC VALUES  
 .000 CONF 15  
 .14C RUDDER  
 .000 POSINE  
 90.000  
 .000  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	X/LT	BETA	MACH	ALPHA	CONFIS	90.070
○	.708	-8.000	.900	DELTAZ	.000	.000
□	.776			X-SRB	.000	.000
◇	.844				CONFIS	.000
△	.912				DELTAZ	.000

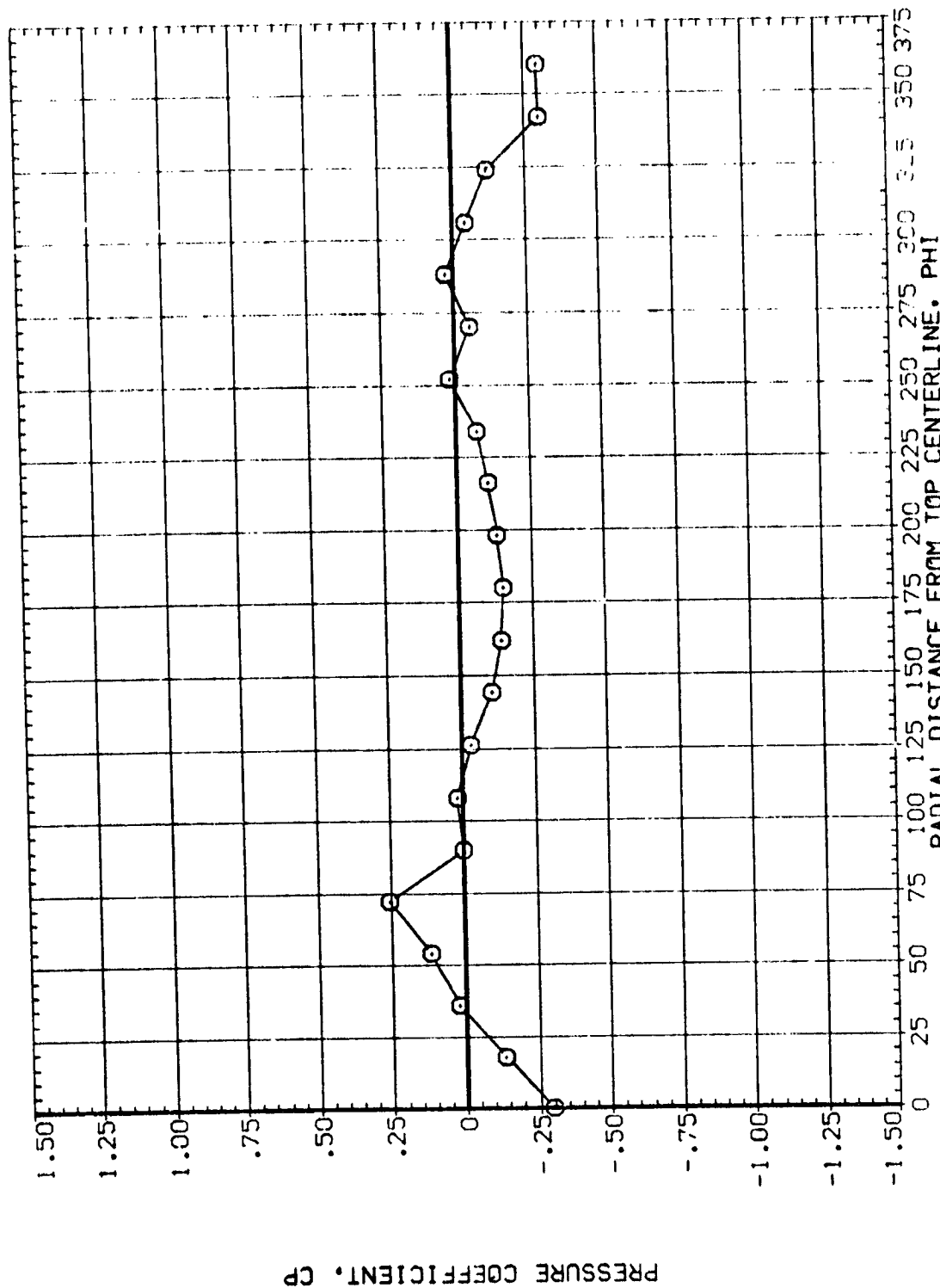


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTA Z
0	.984	-8.000	.900	6.198	5.313	5.313	2.549	.000	.000	.000	.000
				50. IN.	IN.	IN.	IN.	IN.	IN.	CONFIG	RUDDER
										.000	.000
										.000	.000
										.000	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK CAB2702

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .076  
 .155  
 .220  
 .235

BETA .000

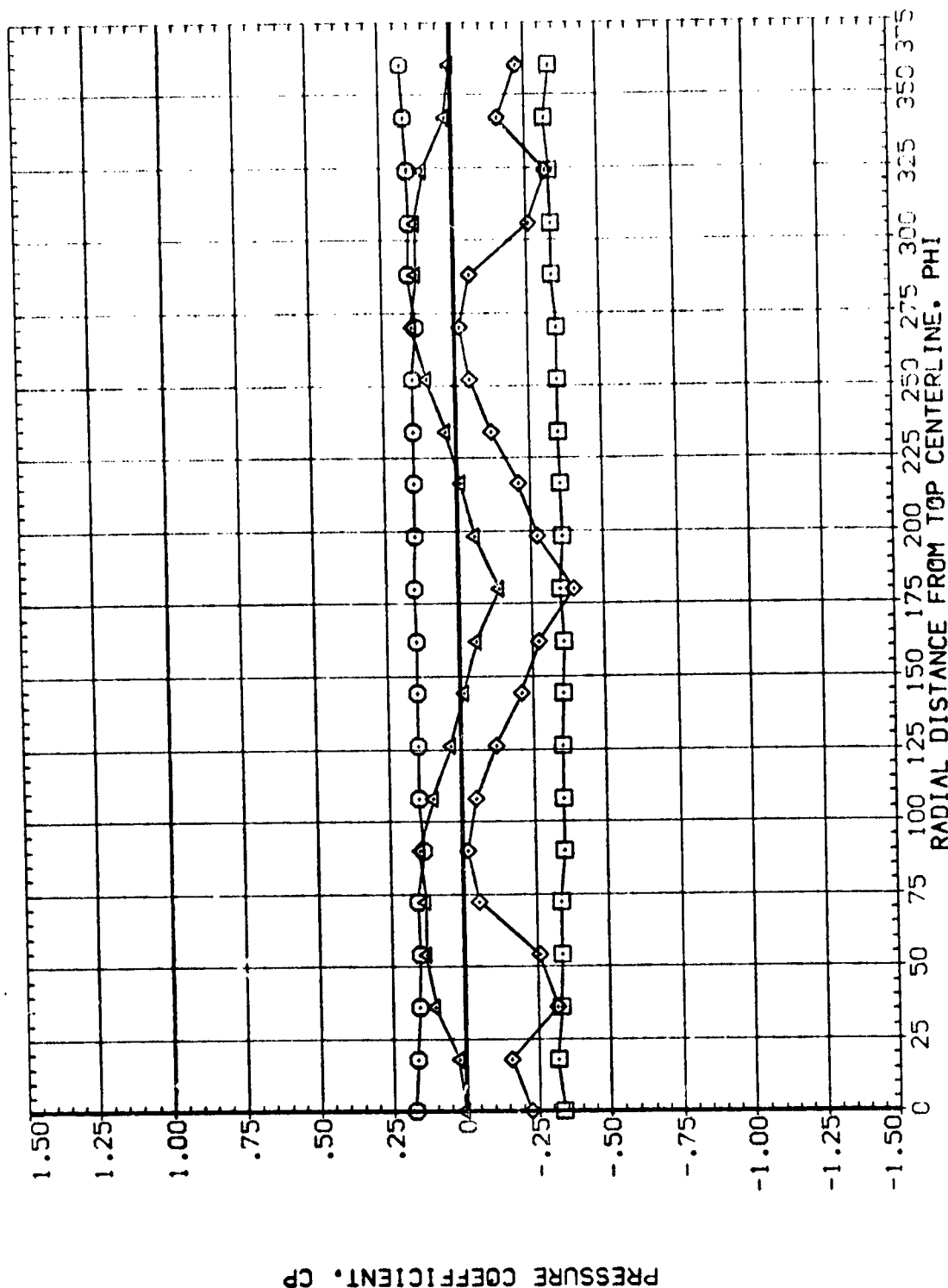
MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

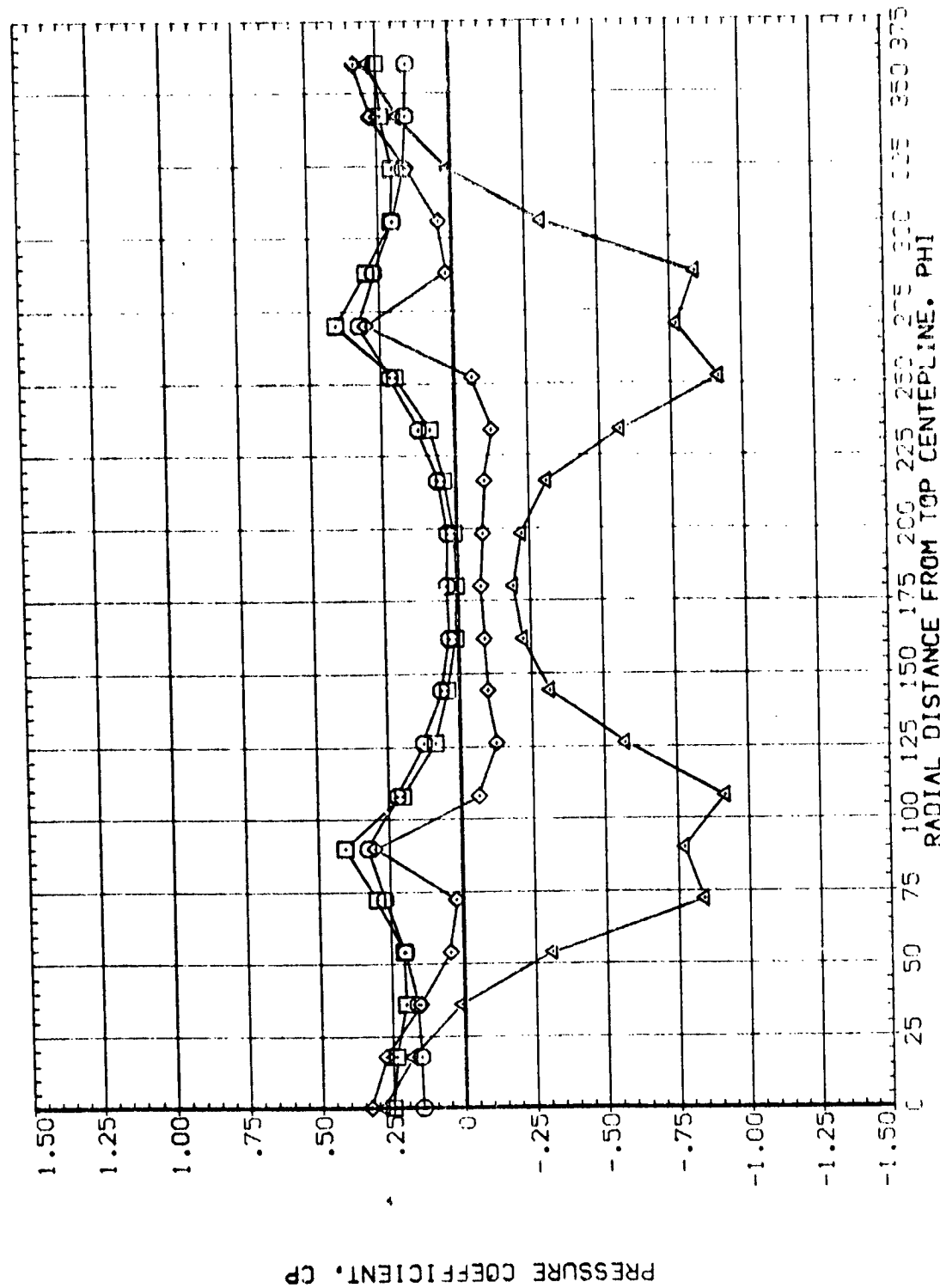
PARAMETER VALUES  
 .000 .000 .000  
 .140 .000 .000  
 .000 .000 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIS	90.000
◇	.271	.000	.900	6.198	5.313	5.313	2.549	IN.	DELTA Z	RJDDER	.000
◇	.314							IN.	X-SPS	3F31NC	.500
◇	.350							IN.			
◇	.382							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03

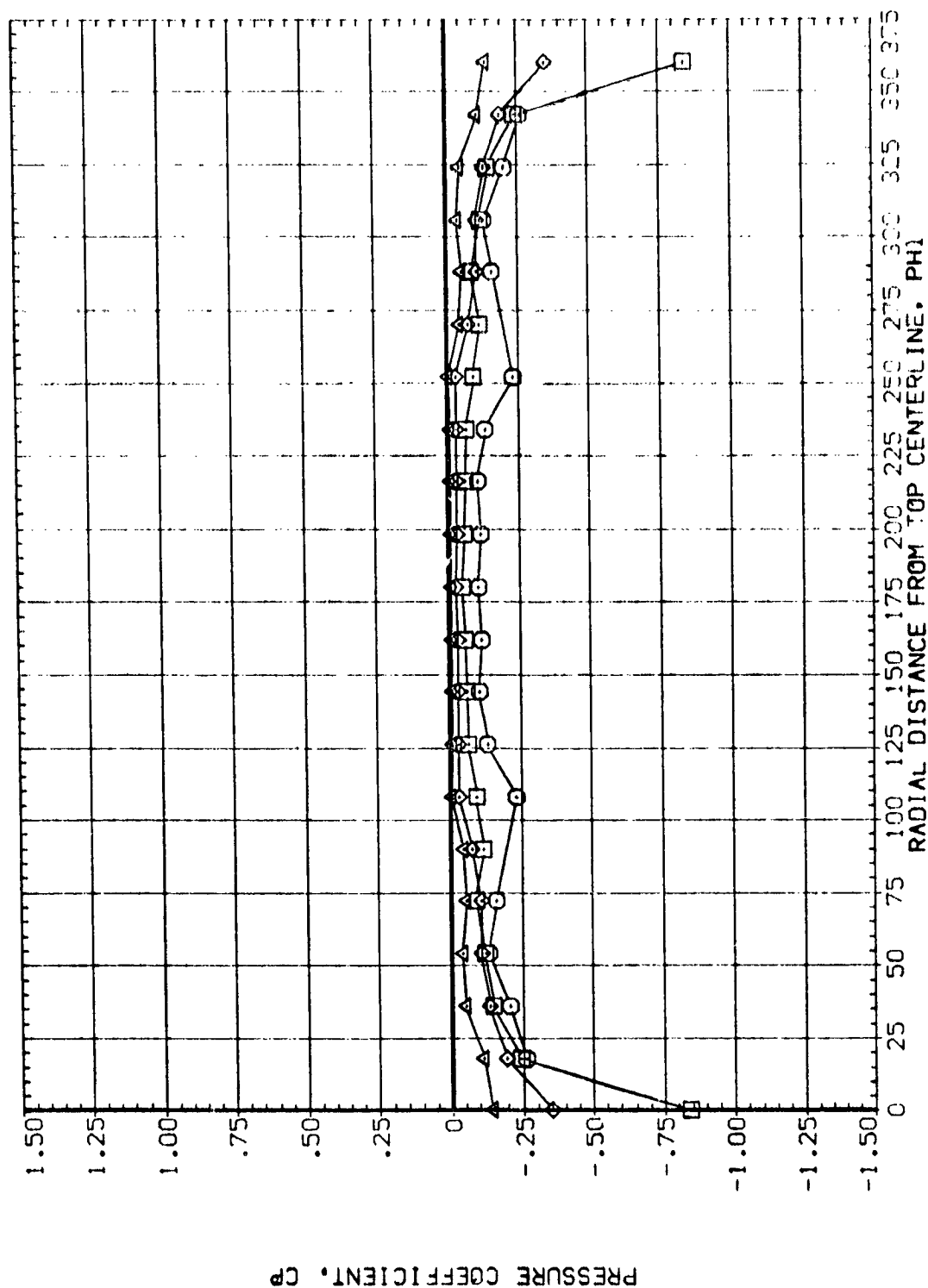
SYMBOL

X/LT	BETA	MACH
.438	.000	.900
.506		
.573		
.641		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRR	2.549
YMRR	.000
ZMRR	.000

STANDARD VALUES

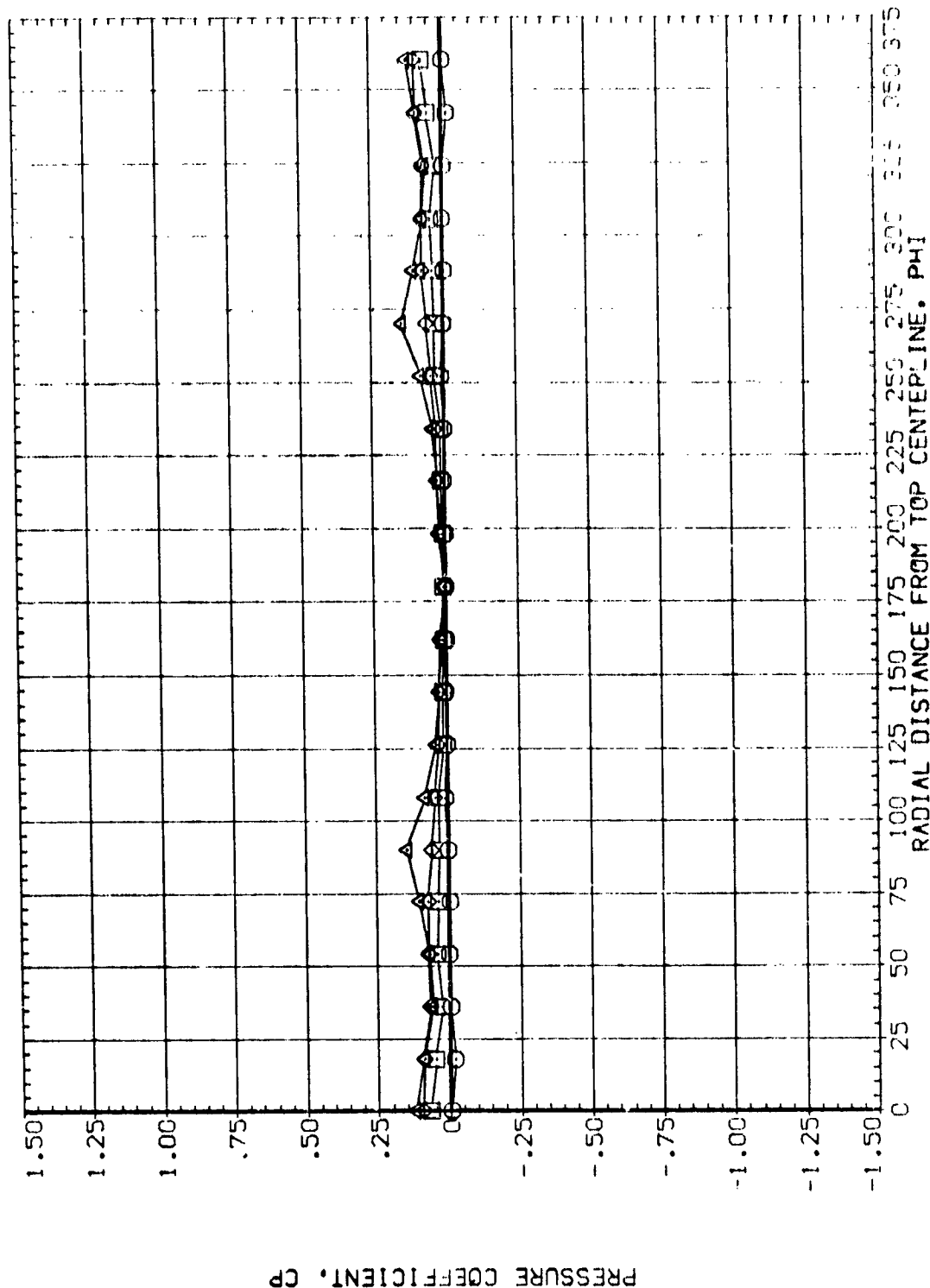
005  
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000 DE



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
○	.708	.000	.900	SREF	6.198	50. IN.	ALPHA	.000	CONF IS	90.000	
□	.776			LREF	5.313	IN.	DELTA Z	.140	RUDDER	.000	
◇	.844			BREF	5.313	IN.	X-SRE	.000	PRBLINC	.500	
△	.912			XMRP	2.549	IN.					
				YMRP	.000	IN.					
				ZMRP	.000	IN.					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK 1A32F 02

SYMBOL X/LT BETA MACH

PARAMETRIC VALUES

REFERENCE DATA

ALPHA

SO. IN.

SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP

.984 .000 .900

.000 .000 .000  
.140 .000 .000  
R000R  
S000R

DELTA Z  
N-598

IN.  
IN.  
IN.

6.198  
5.313  
5.313  
2.549  
.000  
.000

.000 .000 .000

90.000  
-0.000  
-1.500

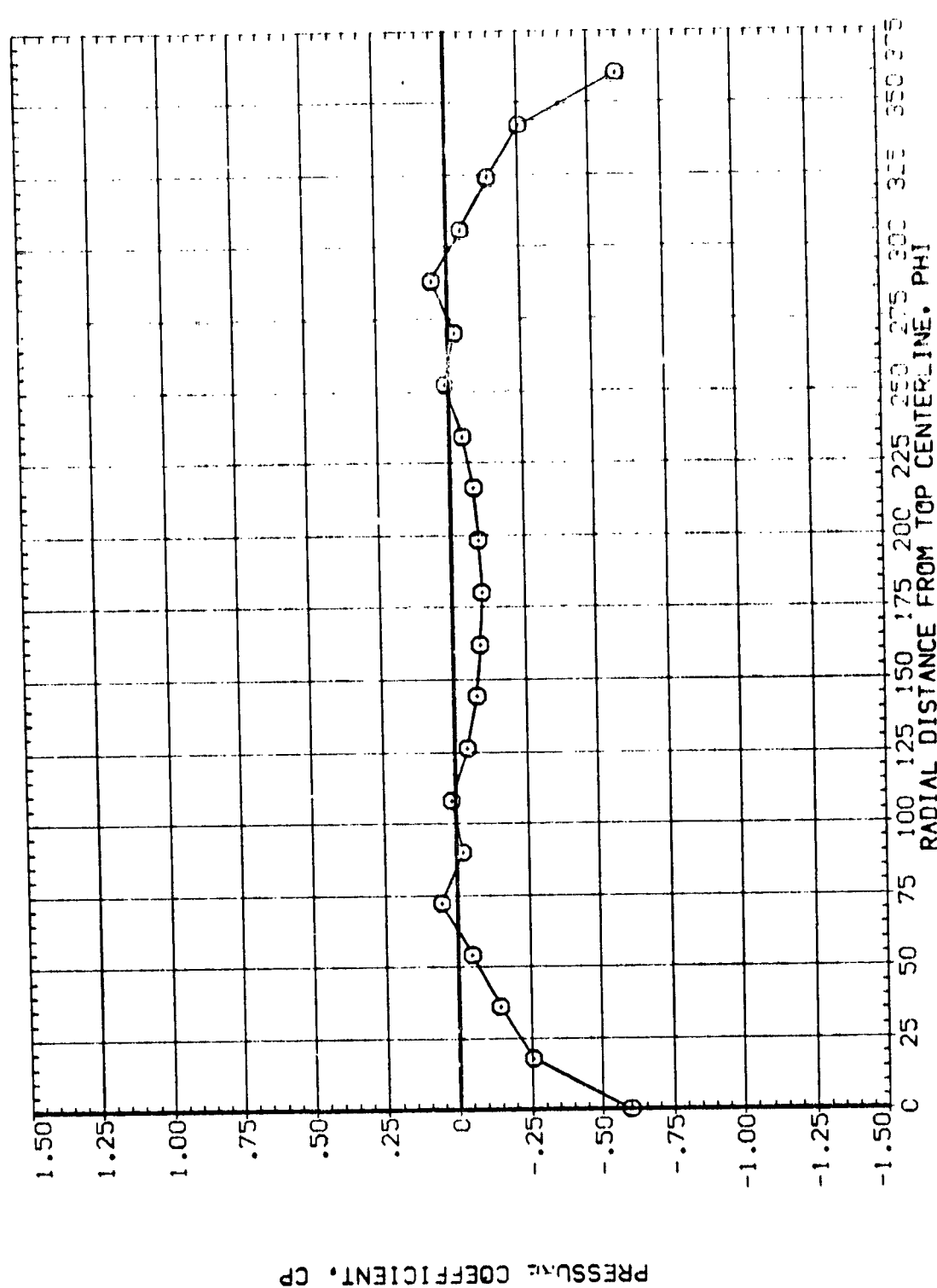
DELTA Z  
N-598

IN.  
IN.  
IN.

6.198  
5.313  
5.313  
2.549  
.000  
.000

.000 .000 .000

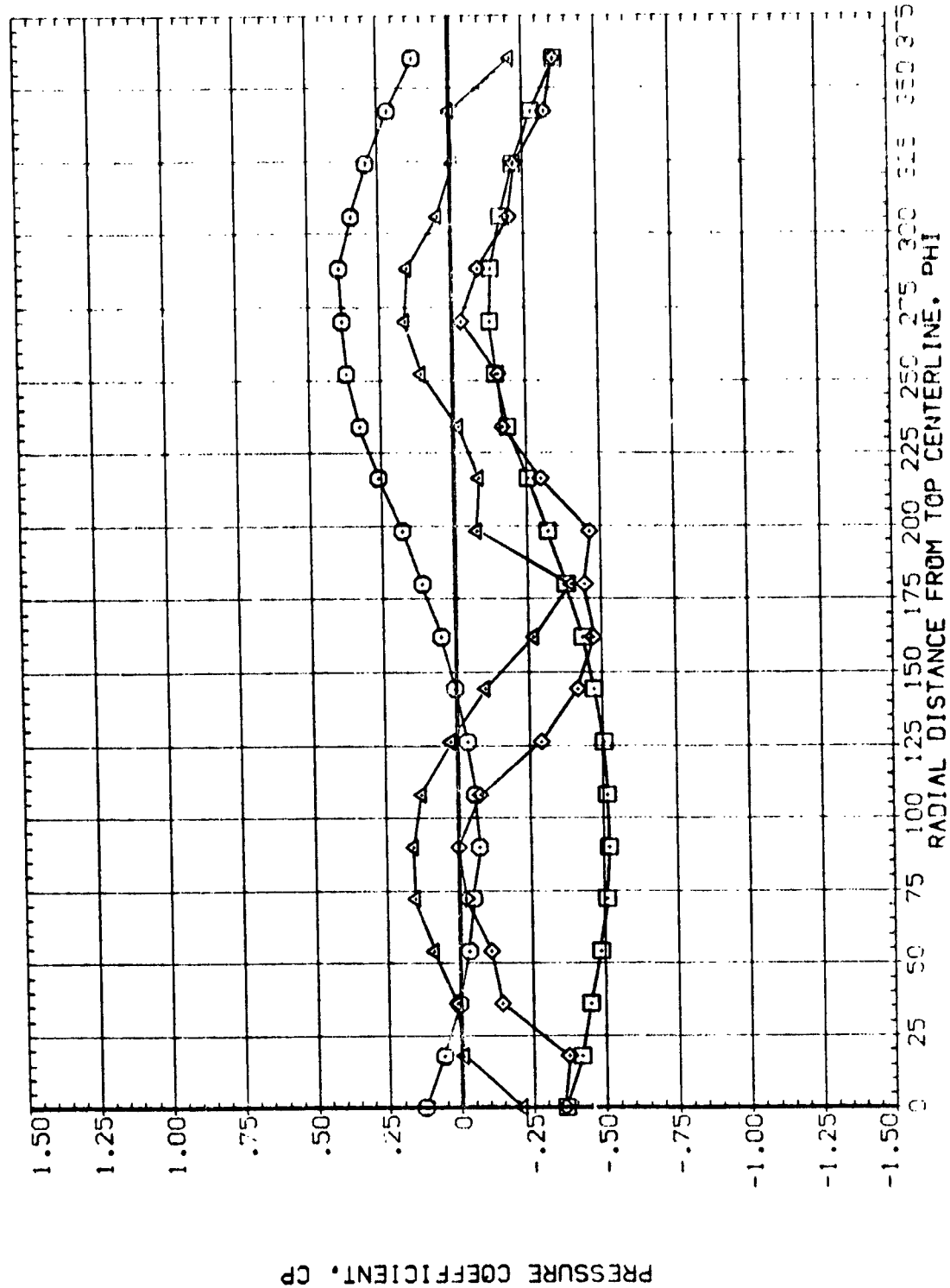
90.000  
-0.000  
-1.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

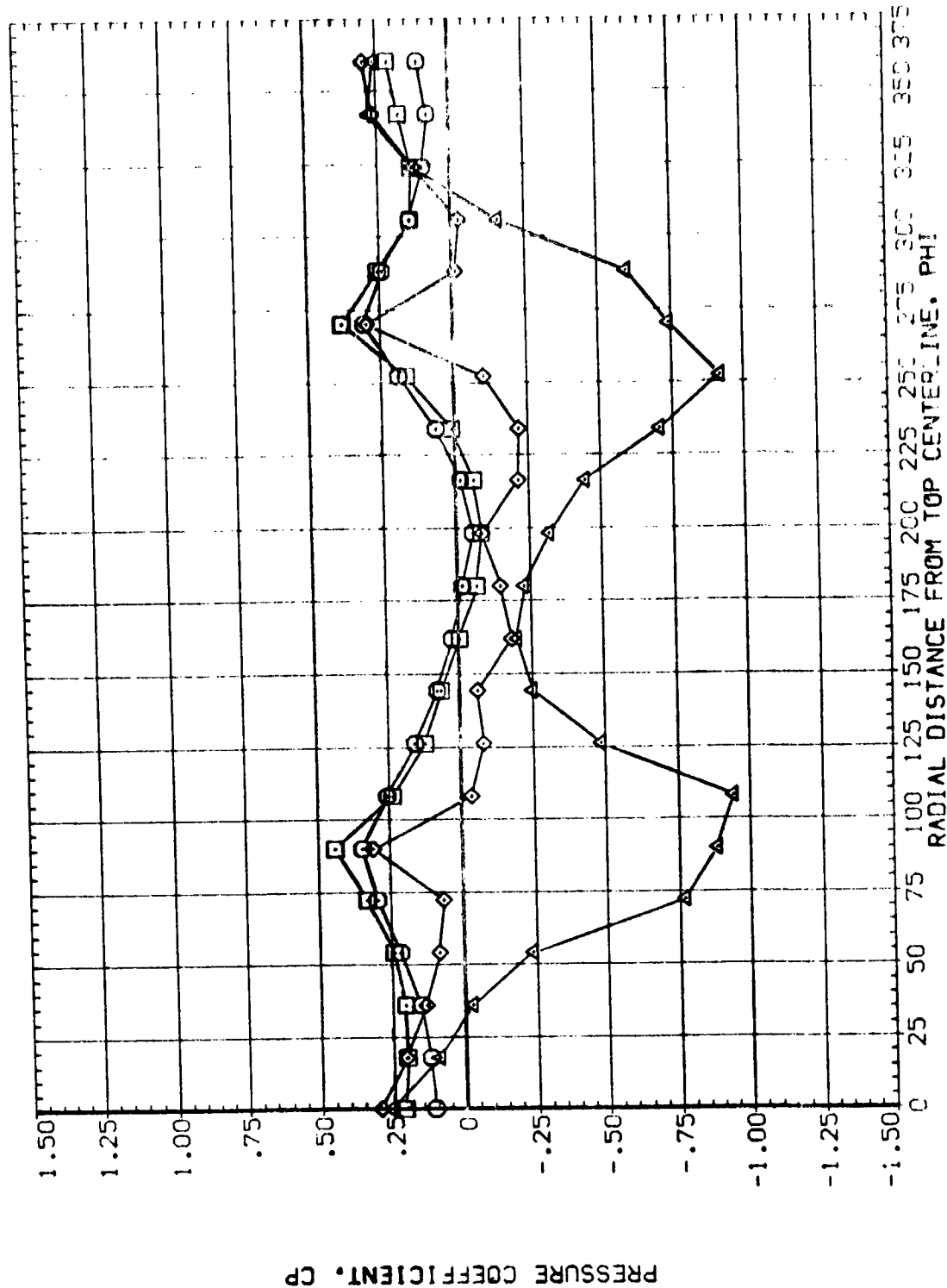
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SG. IN.	ALPHA	DELTA Z	CONF IS
□	.076	8.000	.900	6.198	5.313	5.313	2.543	IN.	0.000	.140	.000
◇	.155							IN.	X-998	.000	.500
△	.220							IN.			
▽	.235							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A821020)

SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	X/LT	BETA	MACH	SREF	LREF	BREF
◇	.271	8.000	.900	6.198	5.313	5.313
□	.314			2.549	1.000	1.000
△	.350			1.000	1.000	1.000
▽	.382			1.000	1.000	1.000

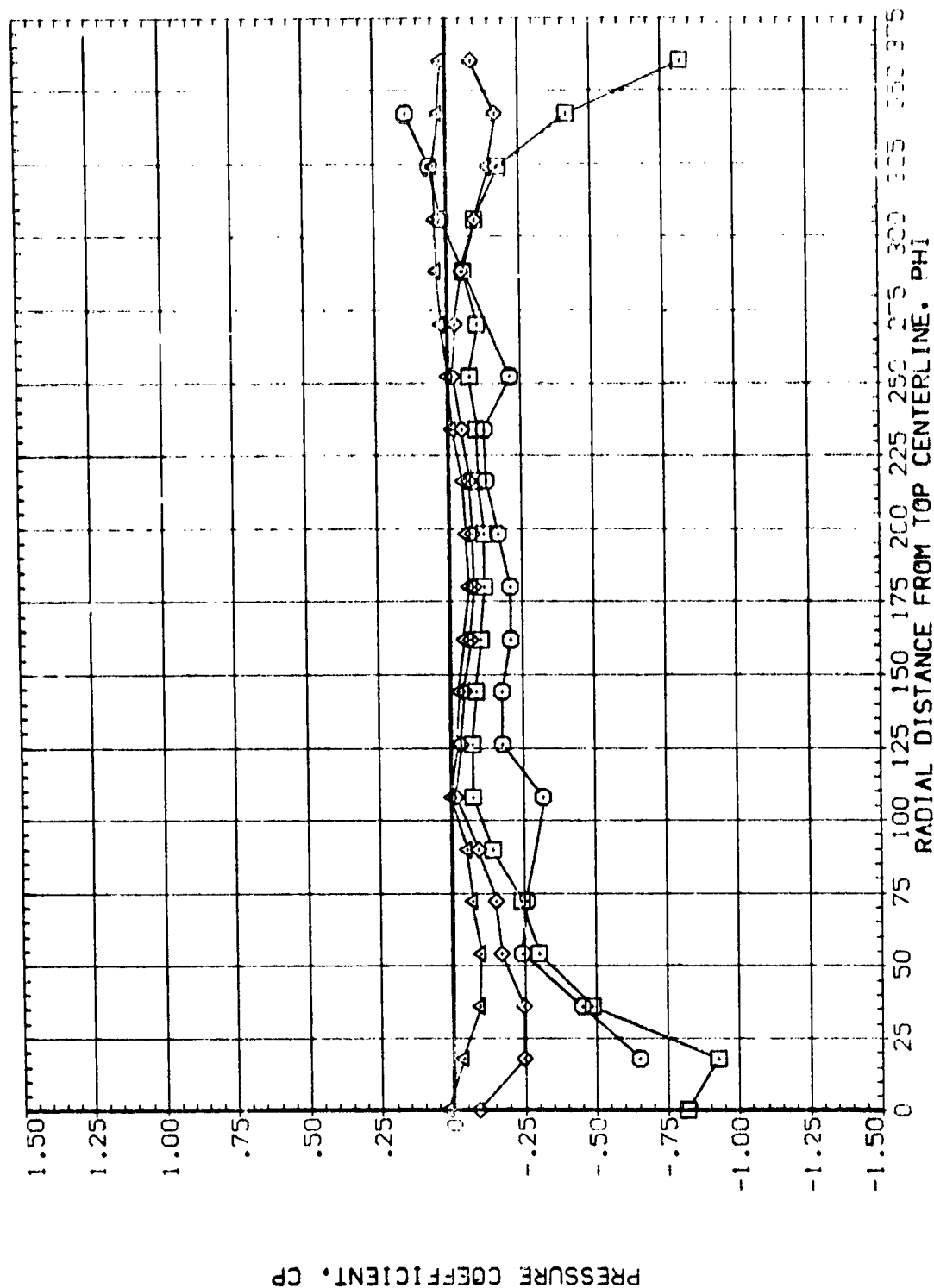


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	50. IN.	ALPHA	CONF IG	90.000	
○	.438	8.000	.900	LREF	5.313	DELTA Z	.000	.000	.000
□	.506			BREF	5.313	X-S98	.140	.000	.000
◇	.573			YMRP	2.549		.000	.000	.500
△	.641			ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MCFC 587(1A32E) T9 S3/2 S3/2 03  
EXTERNAL TANK (A82702)

SYMBOL

LT	BETA	MACH
.708	8.000	.900
.776		
.844		
.912		

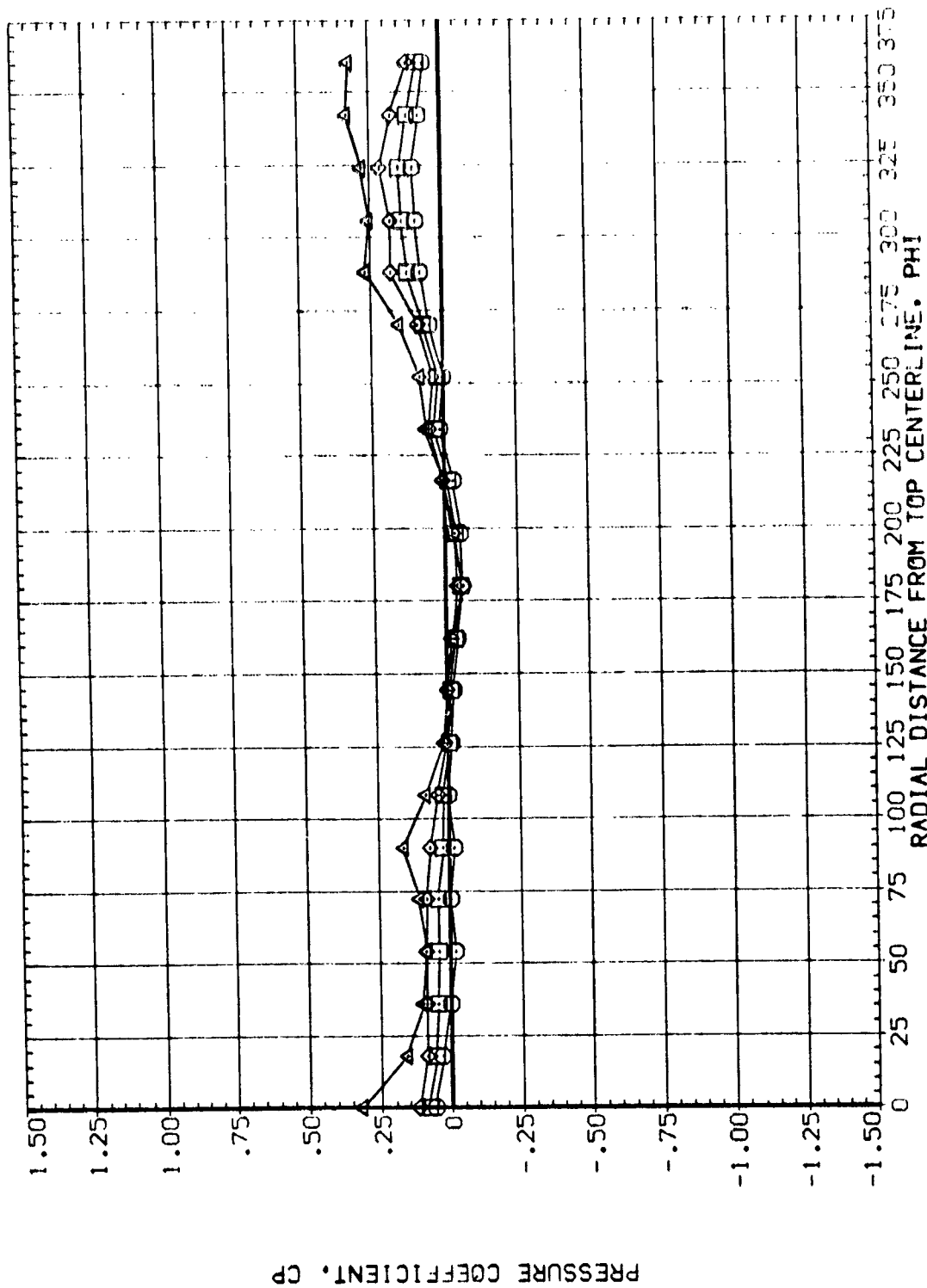
REFERENCE DATA
SREF
LREF
BREF
XMRP
YMRP
ZMRP

z  
g z z z z z z

ALPHA  
DELTA Z  
X-SRB

SECRET

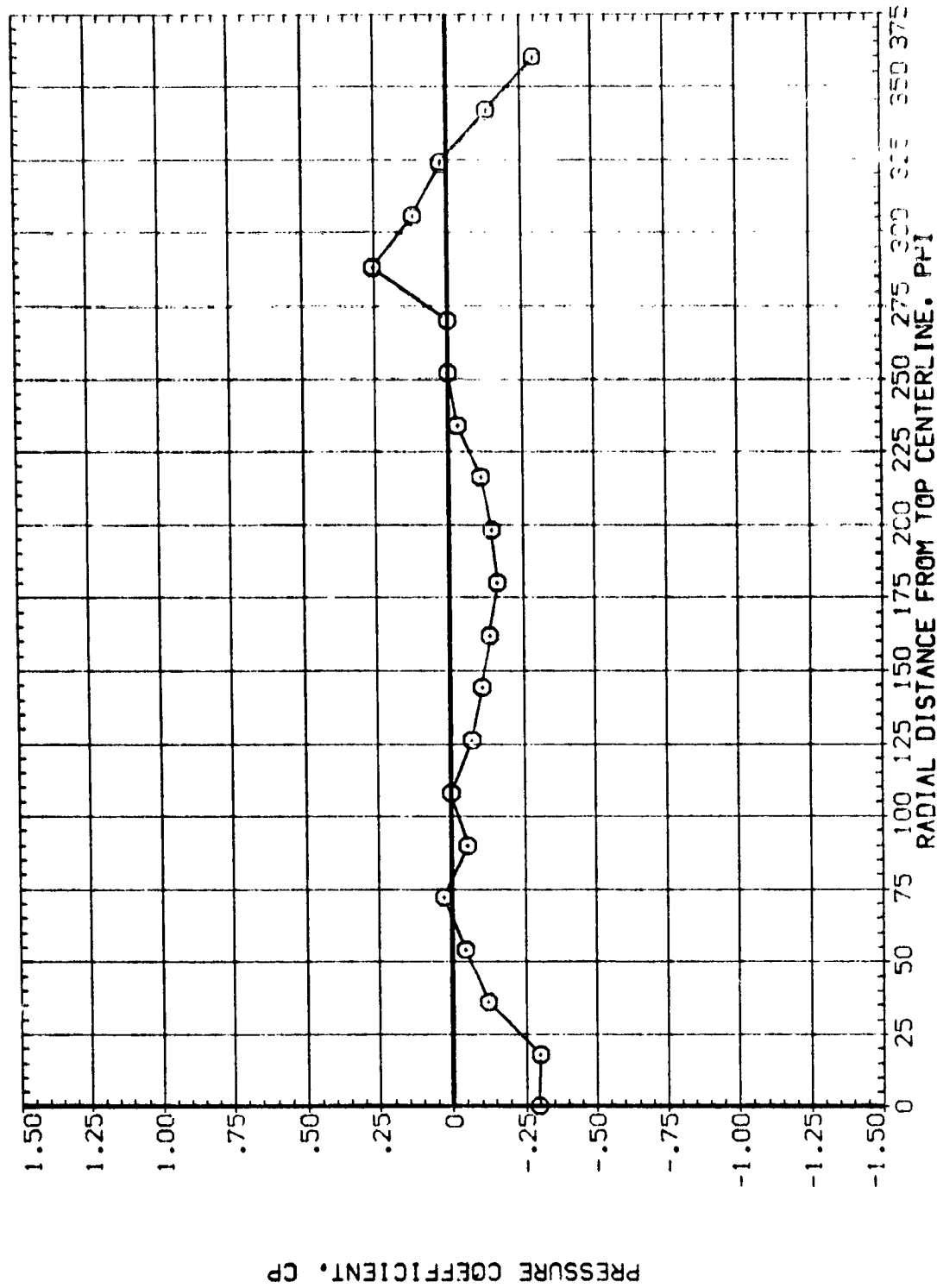
300-05  
300-  
305-



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 33/2 33

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CD/F15	90.000
0	.984	8.000	.900	6.198	5.313	5.313	2.549	IN.	DELTAZ	.000	.000
								IN.	X-S98	.000	.500
								IN.			
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

SYMBOL

17.1  
.076  
.155  
.220  
.235

BETA  
-8.000

MACH  
1.250

REF  
REF  
REF  
MRP  
MRP

DATA  
6.198  
5.313  
5.313  
2.549  
.000  
.000

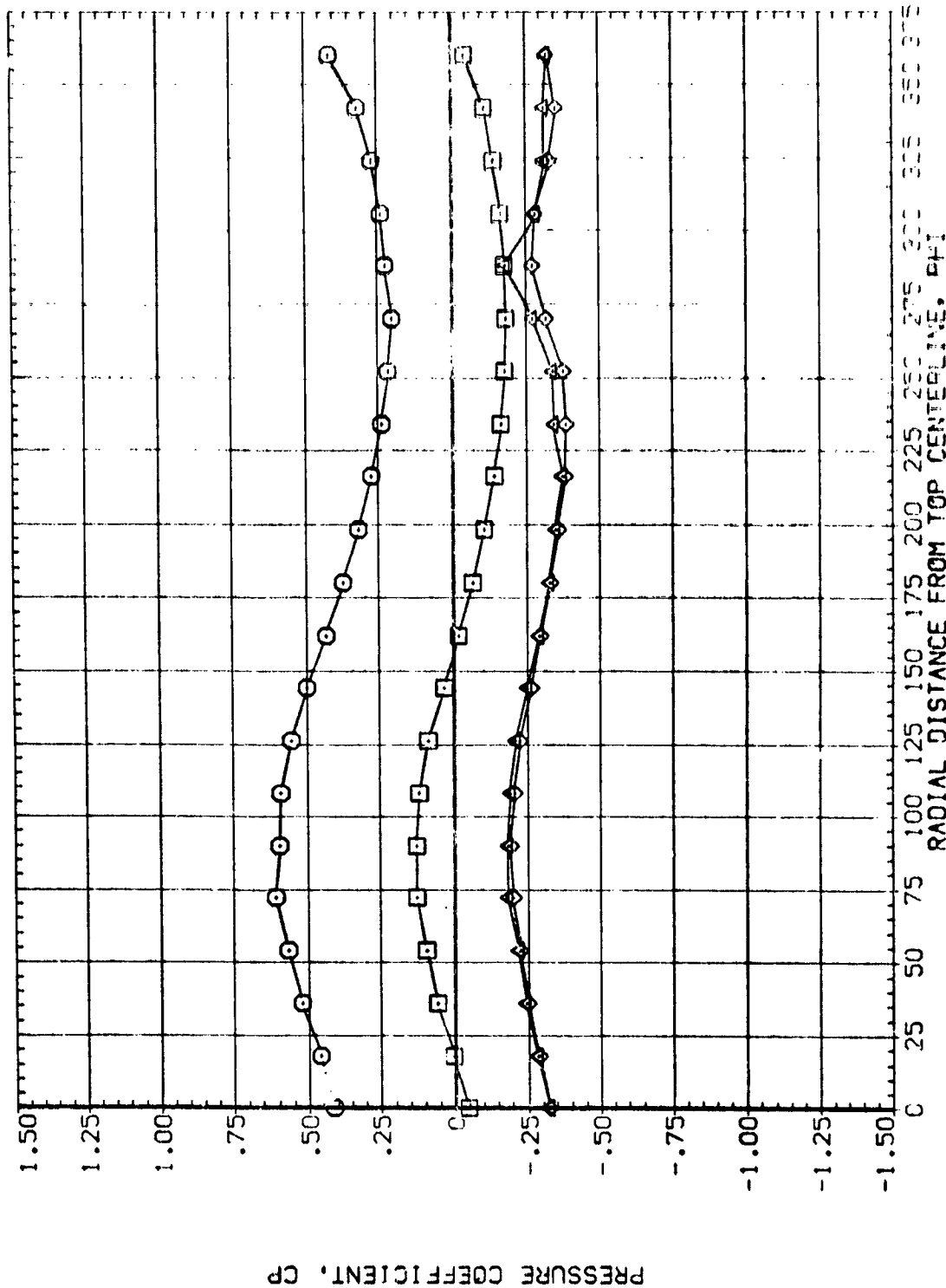
Q22222.

285-X  
DEL 730  
4-27

1. What is the purpose of the study?  
 2. What are the research questions?  
 3. What is the significance of the study?  
 4. What are the limitations of the study?  
 5. What are the conclusions of the study?

End  
Note  
See  
Page 114

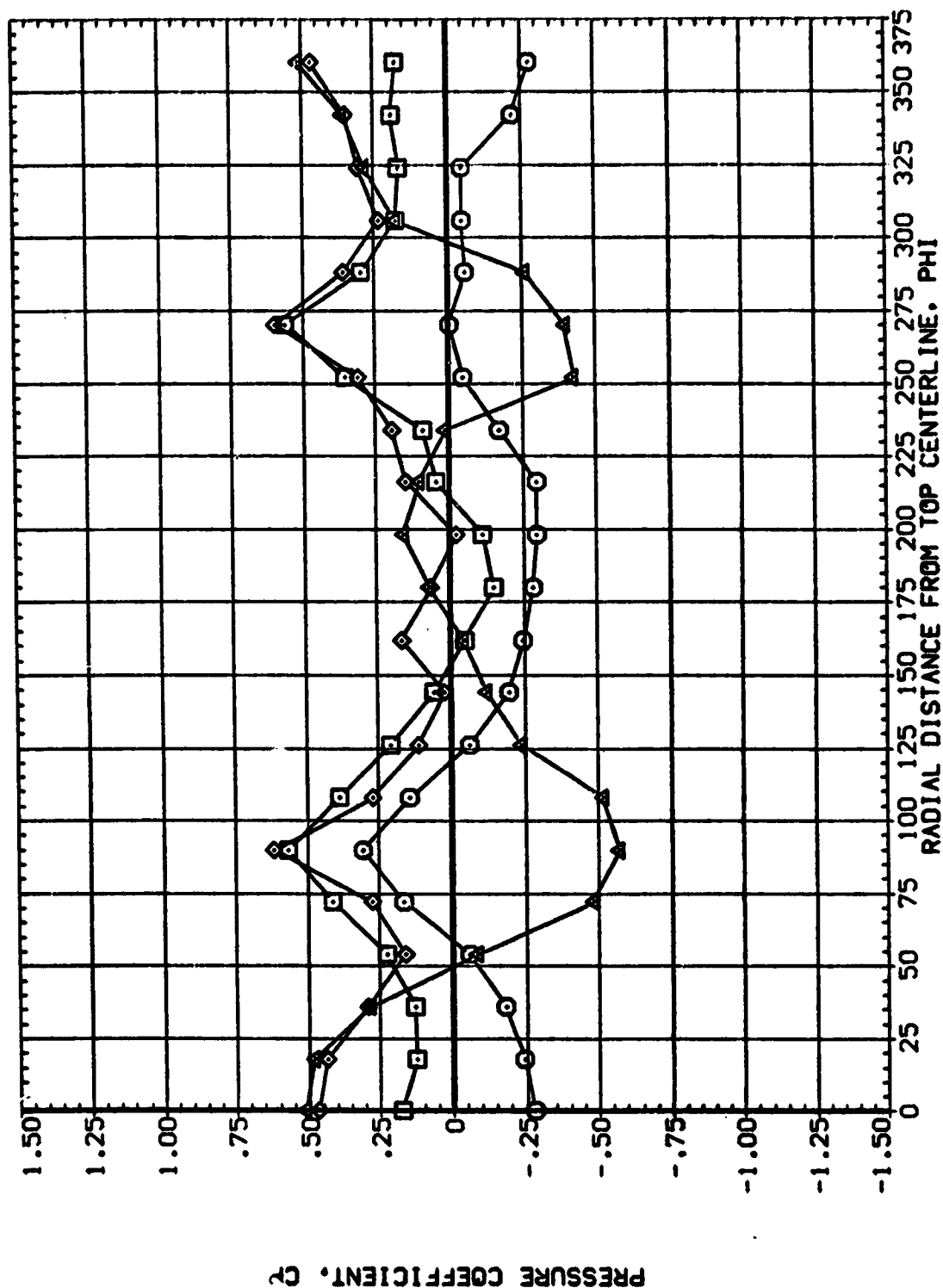
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RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK TO S3/2 93

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

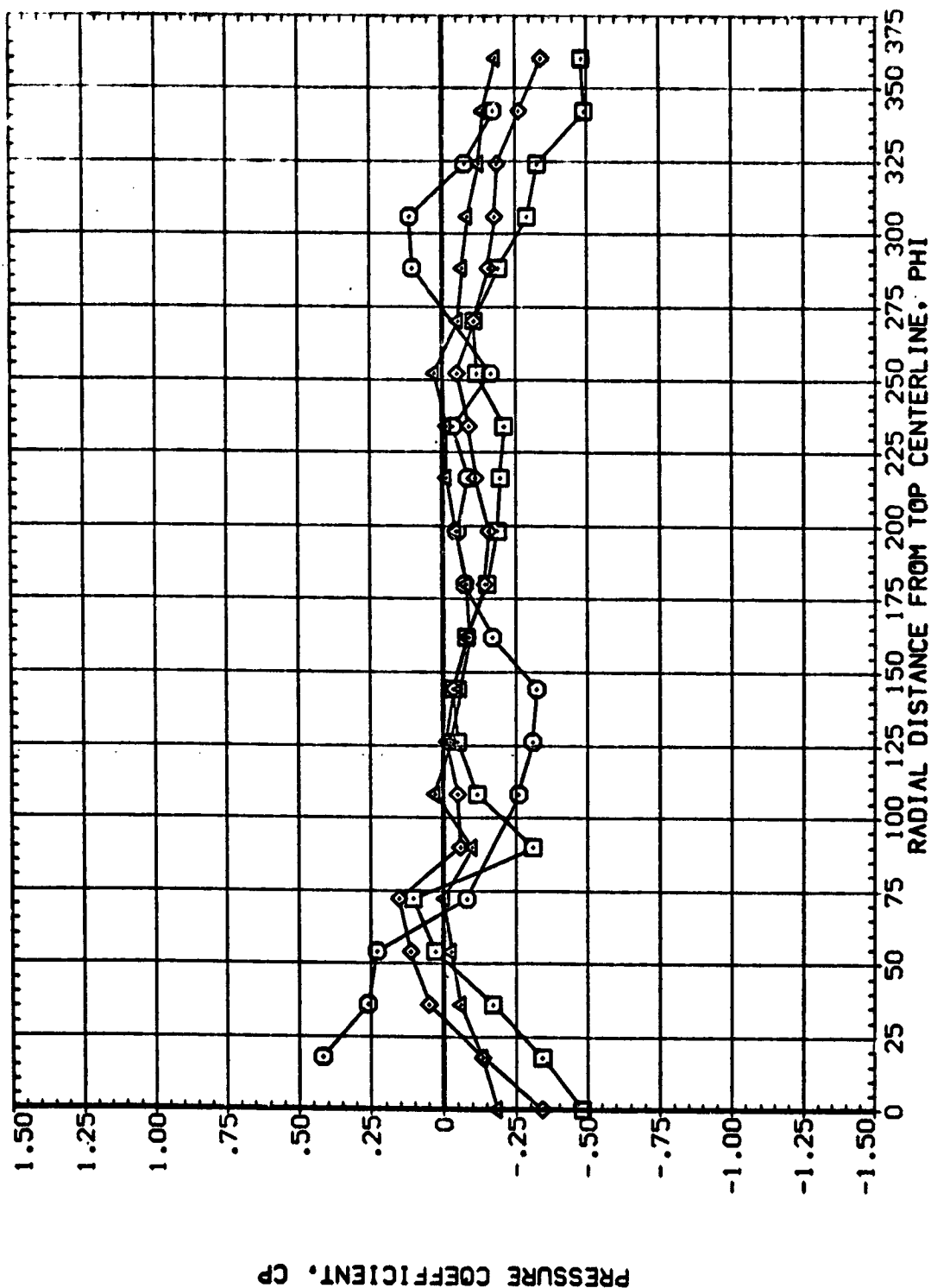
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□	.314			BREF	5.313	IN.	X-S98	.000	ORBIT	.000	
◇	.350			XPRP	2.549	IN.					
△	.382			ZPRP	.000	IN.					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.438	-8.000	1.250	SREF 6.198	.000 CONFIS
□	.506			LREF 5.313	.140 RUDIS
◇	.573			BREF 5.313	.000 ORRINC
△	.641			XMRP 2.549	
				YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○  
 □  
 ◇  
 △

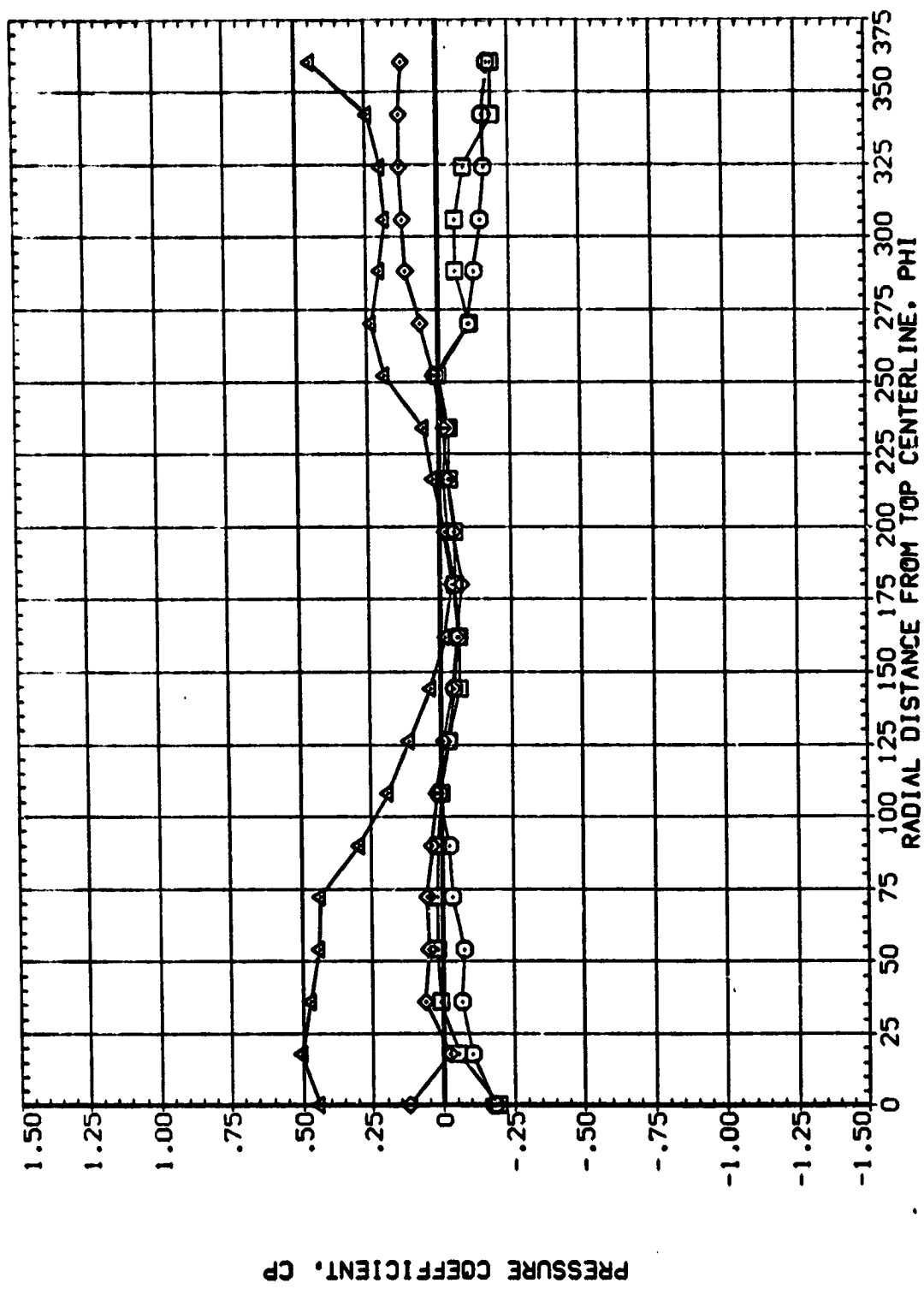
X/LT    BETA    MACH  
 .708    -8.000    1.250  
 .776  
 .844  
 .912

REFERENCE DATA  
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 LREF 5.313  
 BREF 5.313  
 XREF 2.549  
 YREF .000  
 ZREF .000

50. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000    .000    90.000  
 .140    .000  
 .000    .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

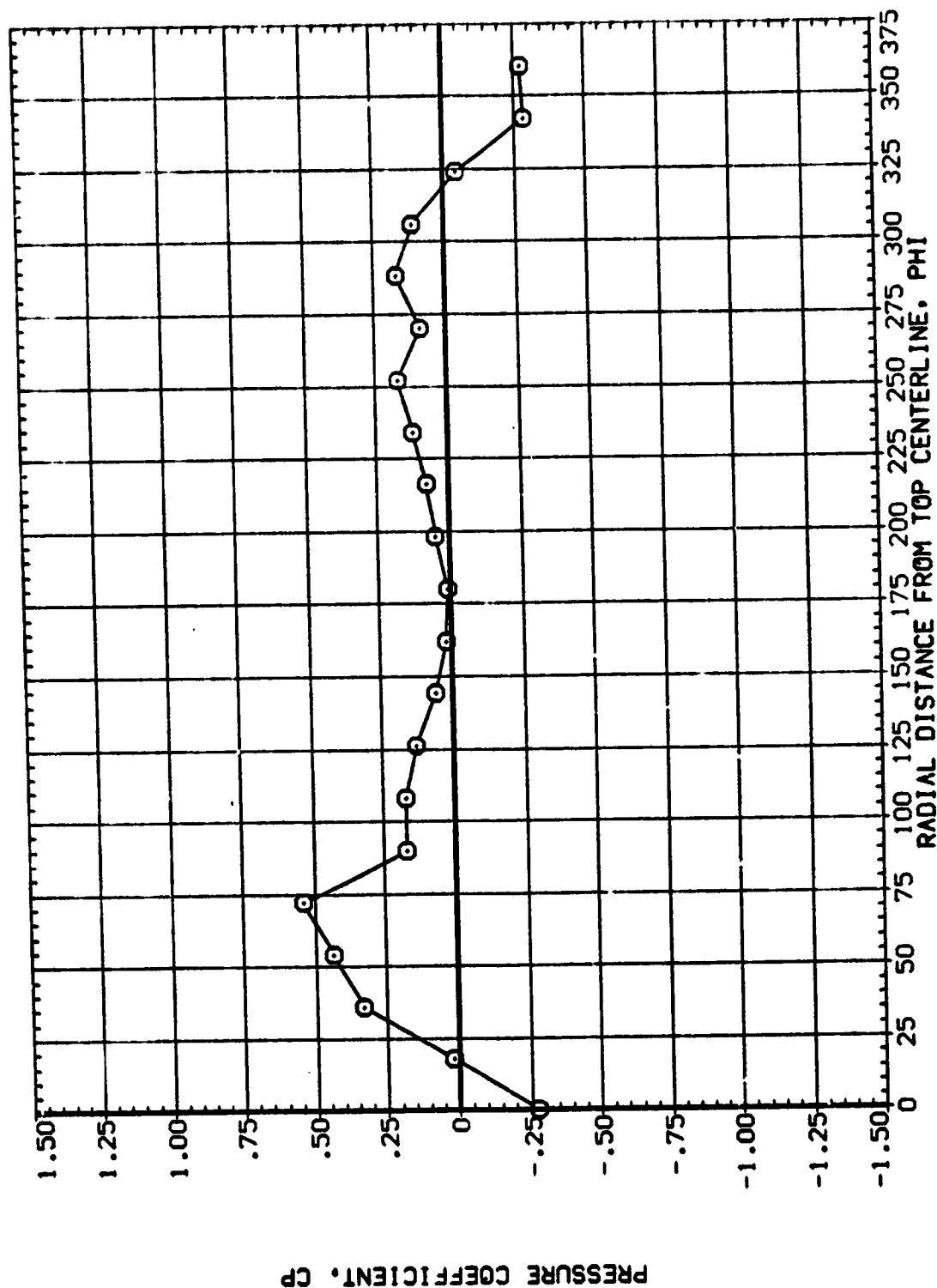
MCFC 557(1A32F) T9 S3/2 S3/2 03

EXTERNAL TANK (A82T02)

MCFC 557(1A32F) T9 S3/2 S3/2 03

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

SIMBL	X/LT	BETA	MACH	REFERENCE DATA	SO. IN.	ALPHA	CONV'G	PARAMETRIC VALUES
0	.994	-8.000	1.250	SREF 6.198	SO. IN.	DELTAZ	.000	90.000
				LREF 5.313	IN.	RODGR	.140	.000
				BREF 5.313	IN.	X-SRB	.000	.500
				XPRP 2.549	IN.			
				YPRP .000	IN.			
				ZPRP .000	IN.			



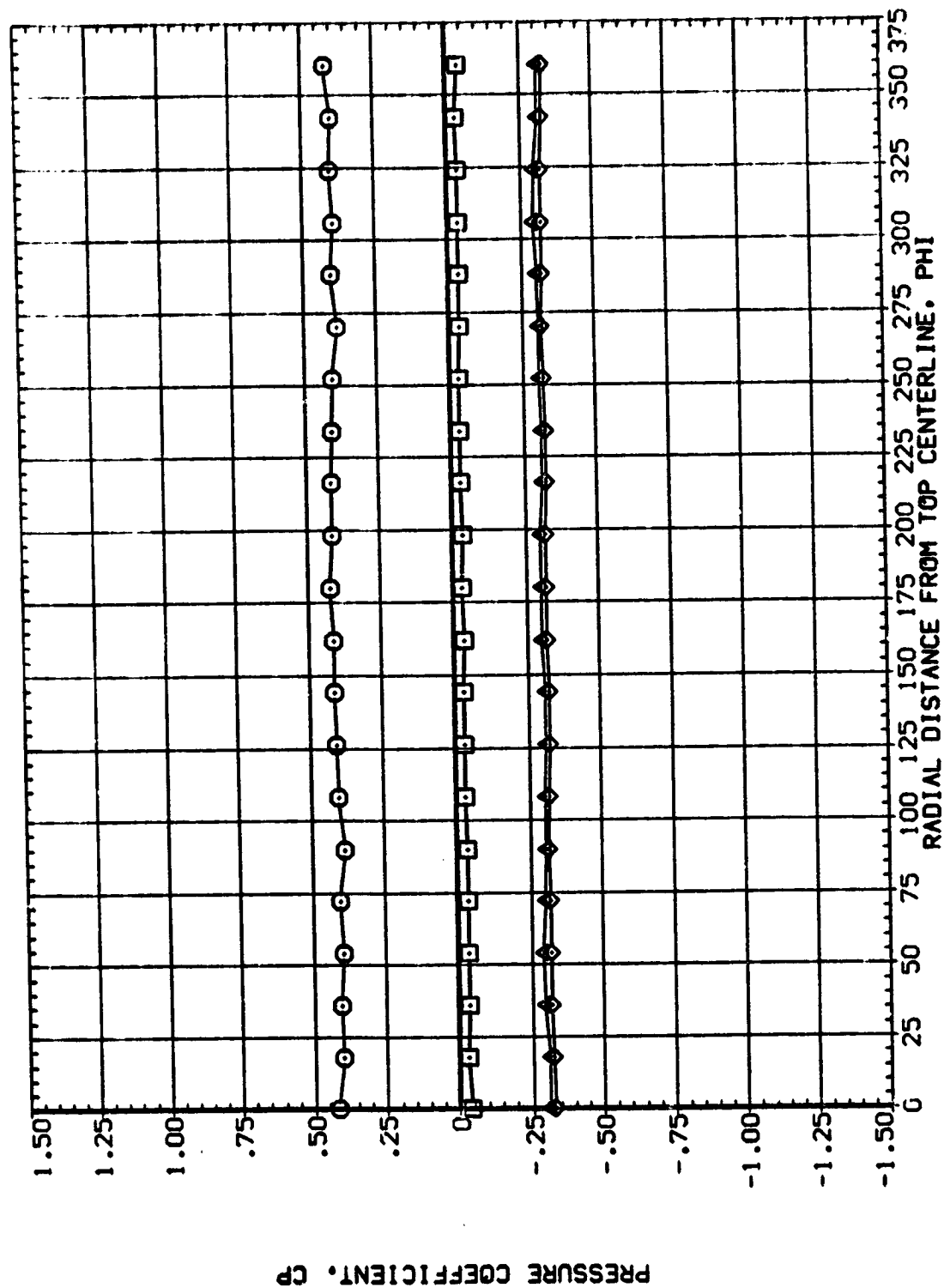
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.076	.000	1.250	SREF 6.198	.000 CONF IG
◇	.155			LREF 5.313	.140 RUDDER
□	.220			BREF 5.313	.000 ORBINE
△	.235			XMRP 2.549	.500
				YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
○  
□  
◇  
△

X/LT .438  
.506  
.573  
.641

BETA .000

MACH 1.250

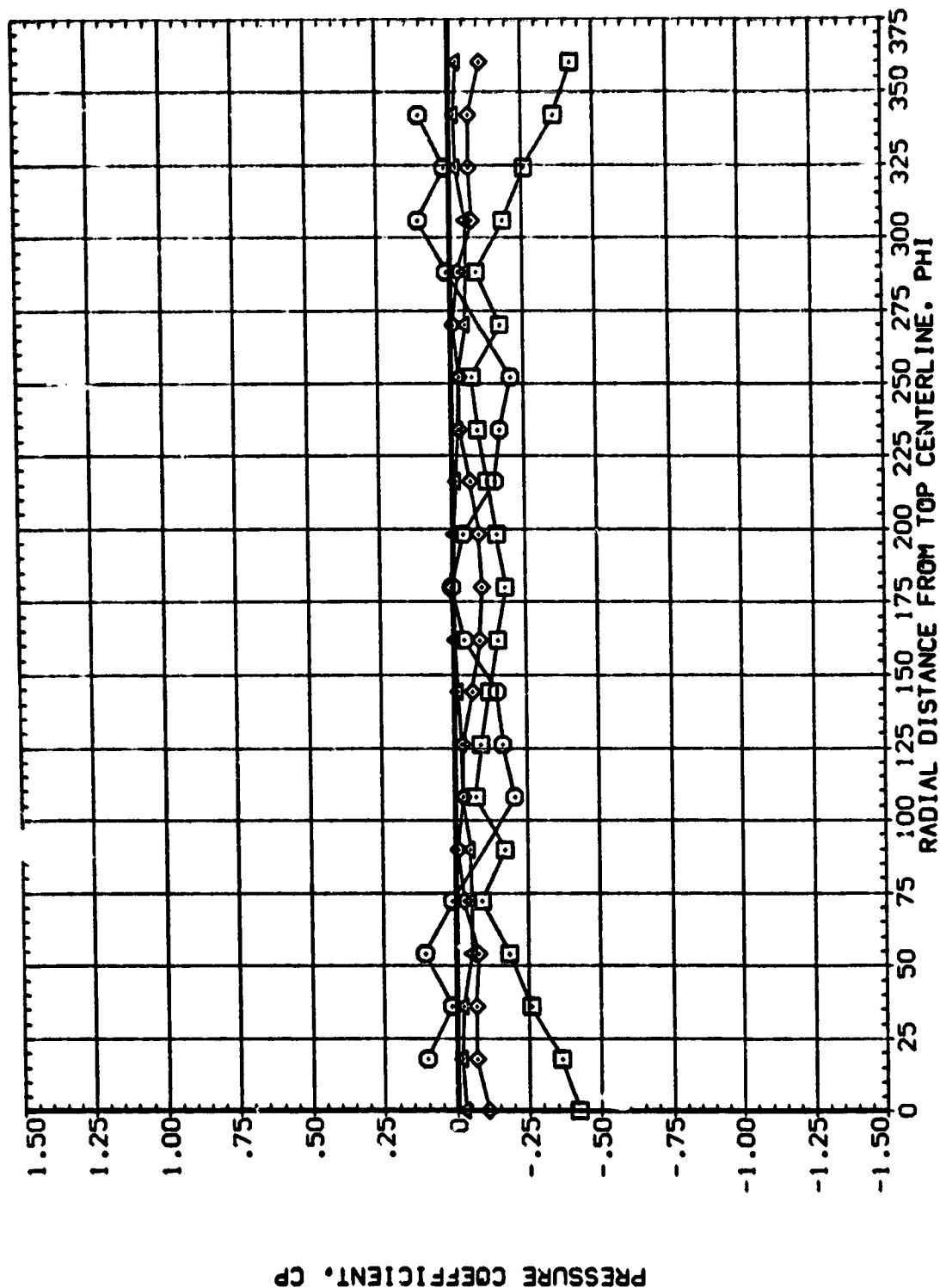
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YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000 .000  
.140 RUDDER  
.000 ORIGIN

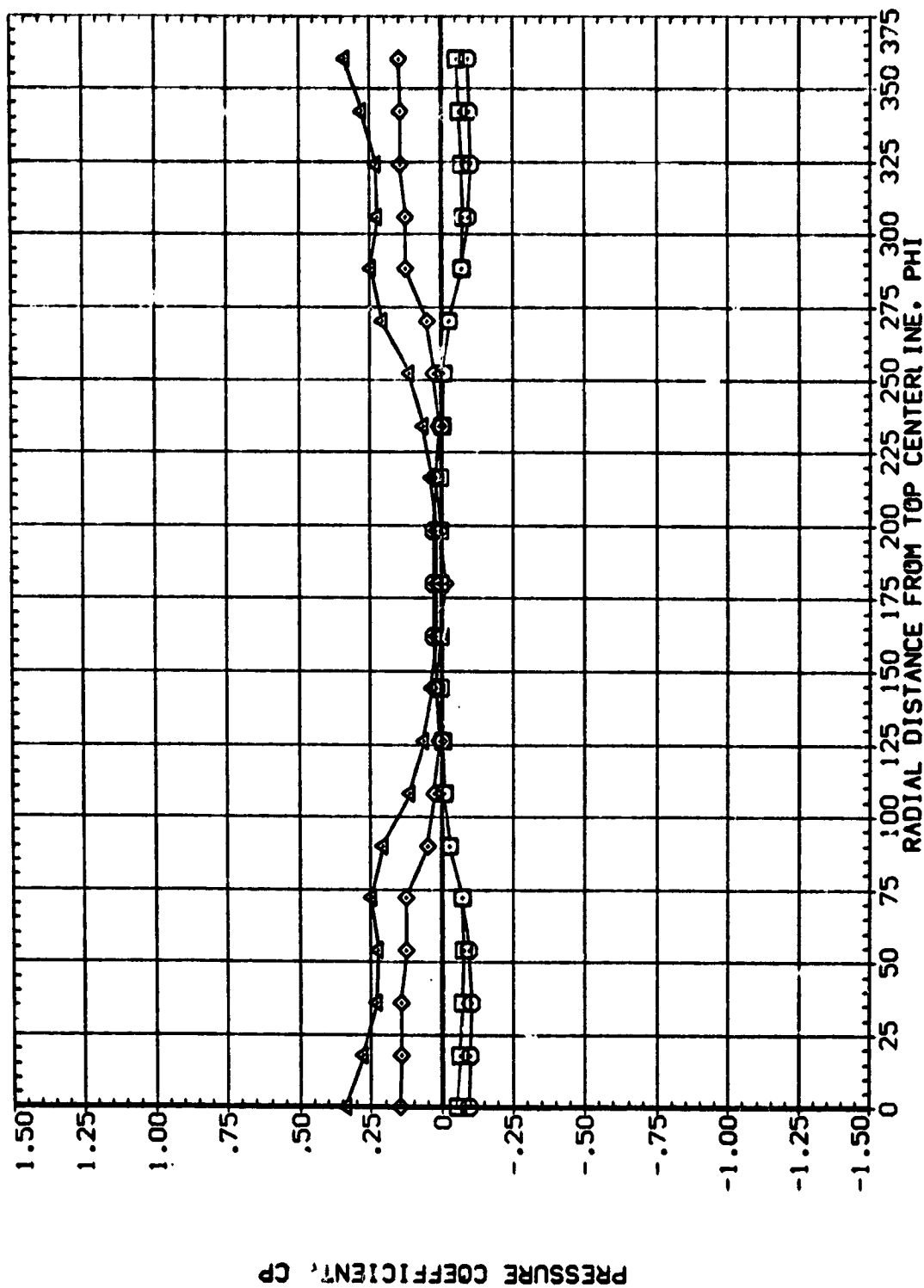
90.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

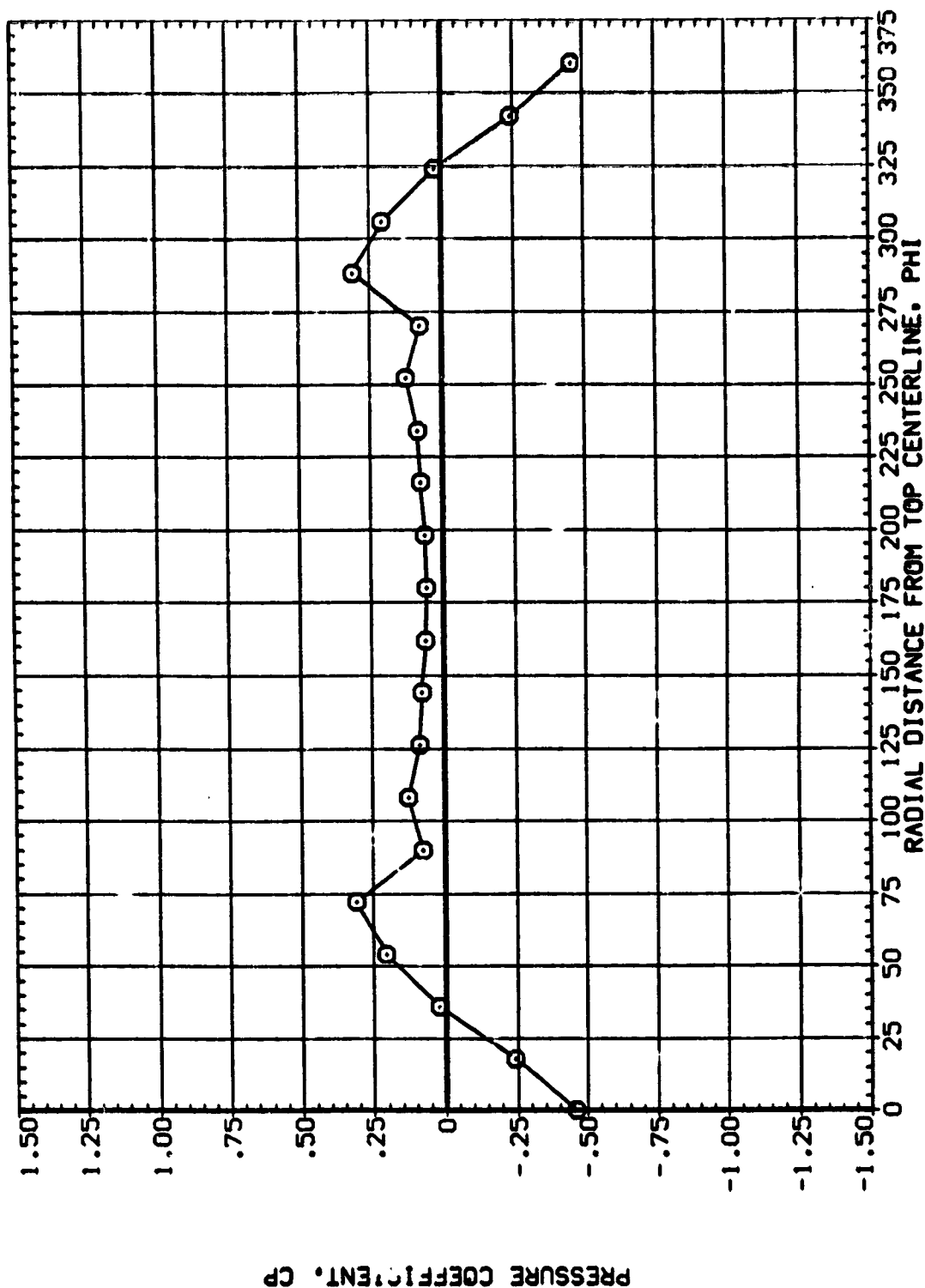
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□	.708	.000	1.250	SREF 6.198	CONFIC 90.000
◇	.776			LREF 5.313	RUDER .000
△	.844			BREF 5.313	ORBITC .500
	.912			XMRP 2.549	
				YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

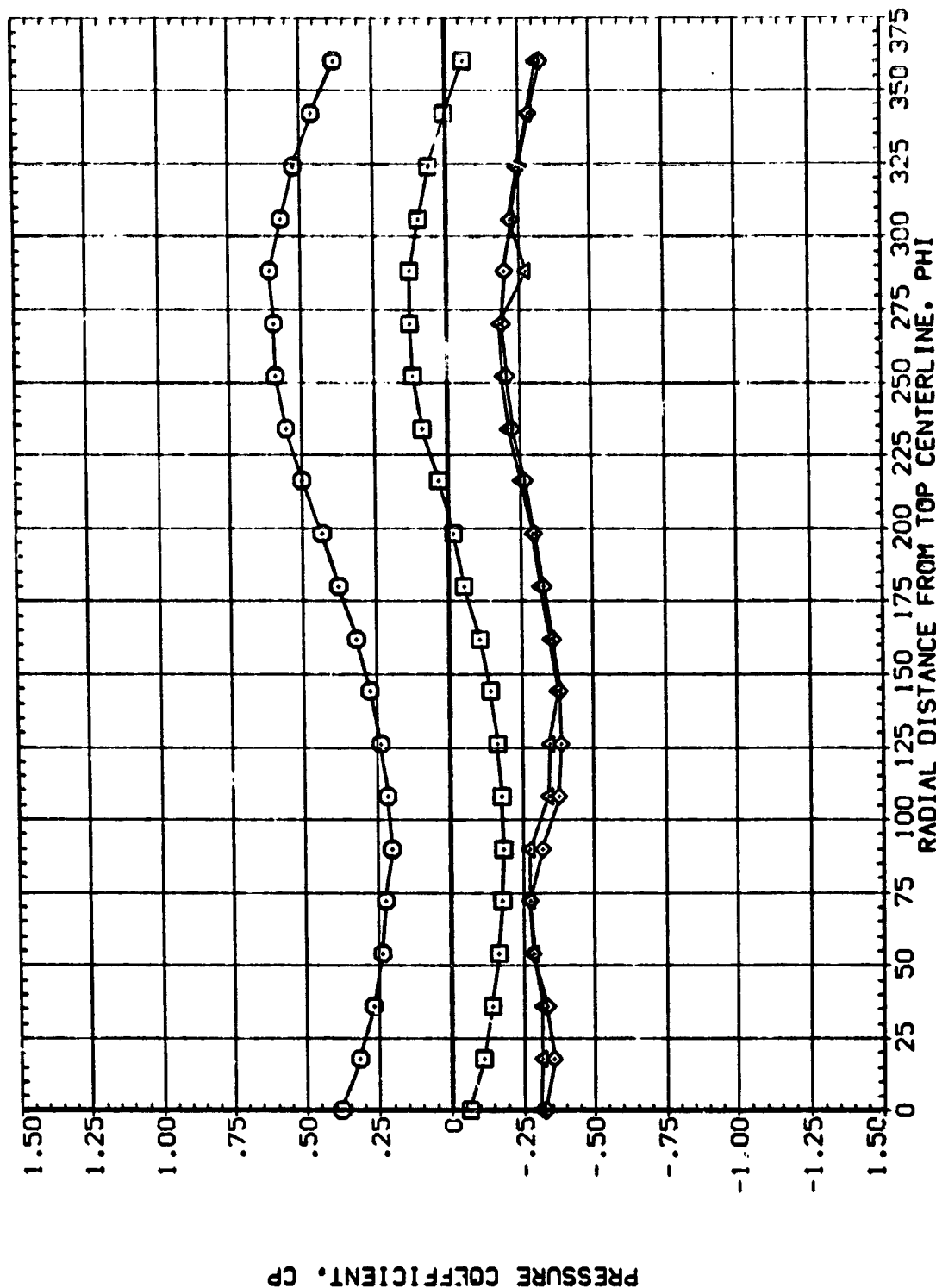
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				SREF	LREF	BREF	XREF	ALPHA	DELTAZ	CONF IG	RUDDER
0	.504	.000	1.250	6.198	5.313	5.313	2.549	X-SRB	X-SRB	.000	.000
				YMRP	ZMRP					.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	6.198	50. IN.	ALPHA	CONF 15	90.000		
○	.076	8.000	1.250	LREF	5.313	IN.	DELTA Z	.000	RUDER	.000	
□	.155			BREF	5.313	IN.	X-SRB	.140	ORBIT	.000	
◇	.220			XMRP	2.549	IN.		.000		.500	
△	.235			YMRP	.000	IN.					
				ZMRP	.000	IN.					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
○  
□  
◇  
△

X/LT .271  
.314  
.350  
.382

BETA 8.000

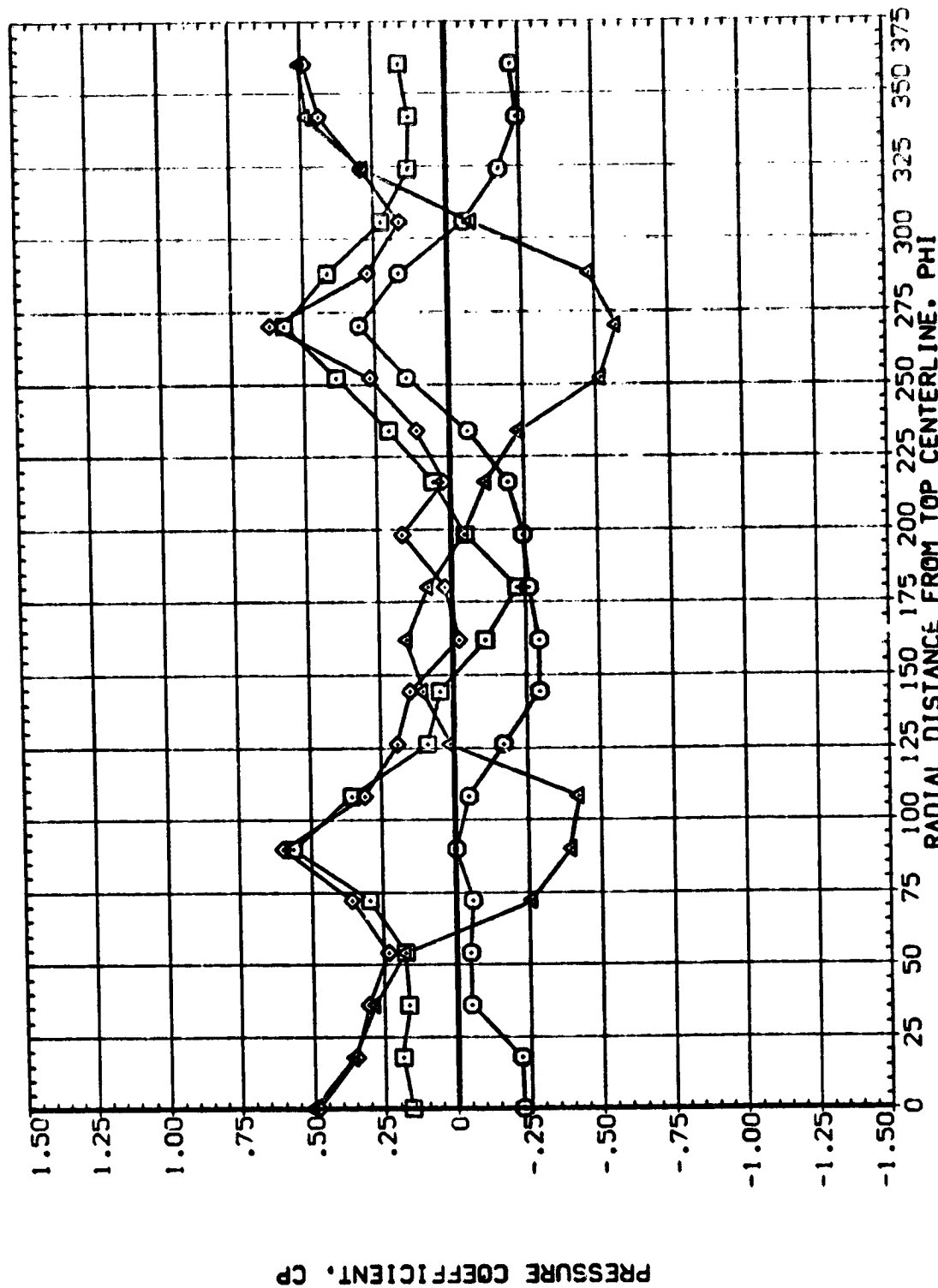
MACH 1.250

REFERENCE DATA  
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LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA2  
X-SRB

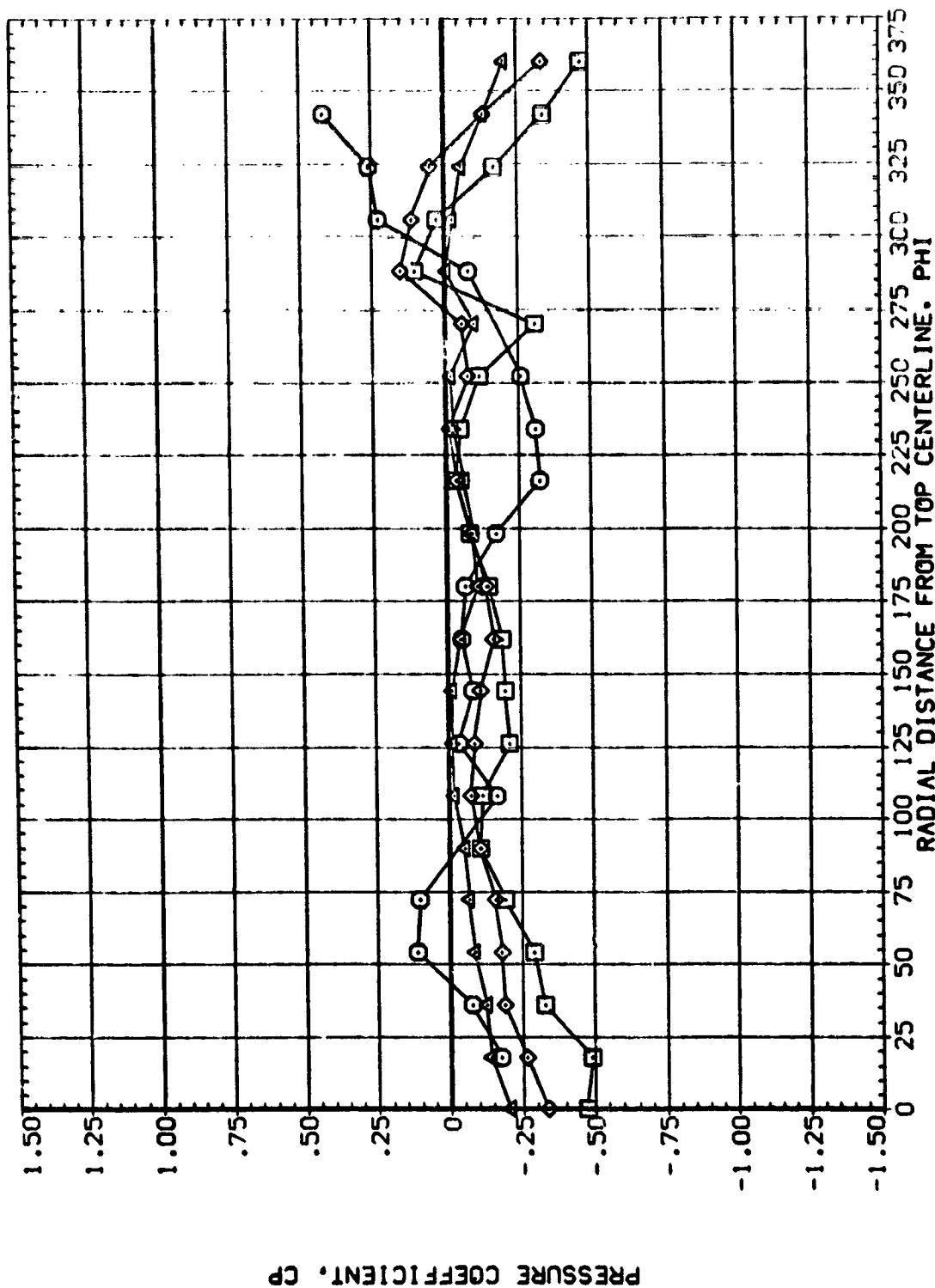
PARAMETRIC VALUES  
CONF 15 .000  
R-REF .140  
DEB INC .000  
DEB INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82702)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SD, IN.	ALPHA	DELTA Z	CONFID
○	.438	8.000	1.250	5.198	5.313	5.313	2.549	IN.	1.598	1.40	.000
□	.506							IN.			.000
◇	.573							IN.			.500
△	.641							IN.			.500

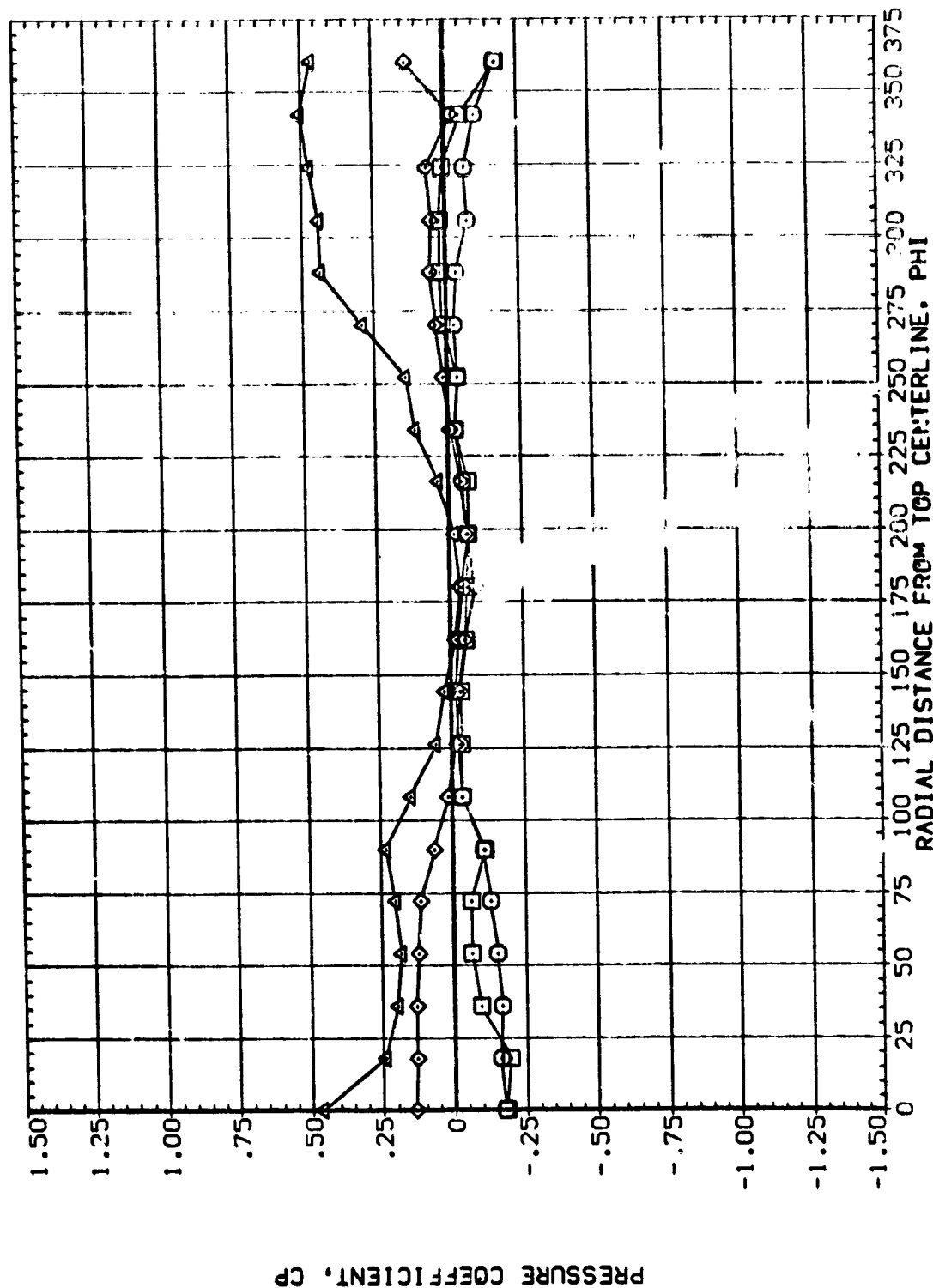


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	CONFIS	CONFIS
○	.708	8.000	1.250	6.198	5.313	5.313	2.549	.000	.000	.000	.000
□	.776									.140	.000
◇	.844									.000	.000
△	.912									.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
O

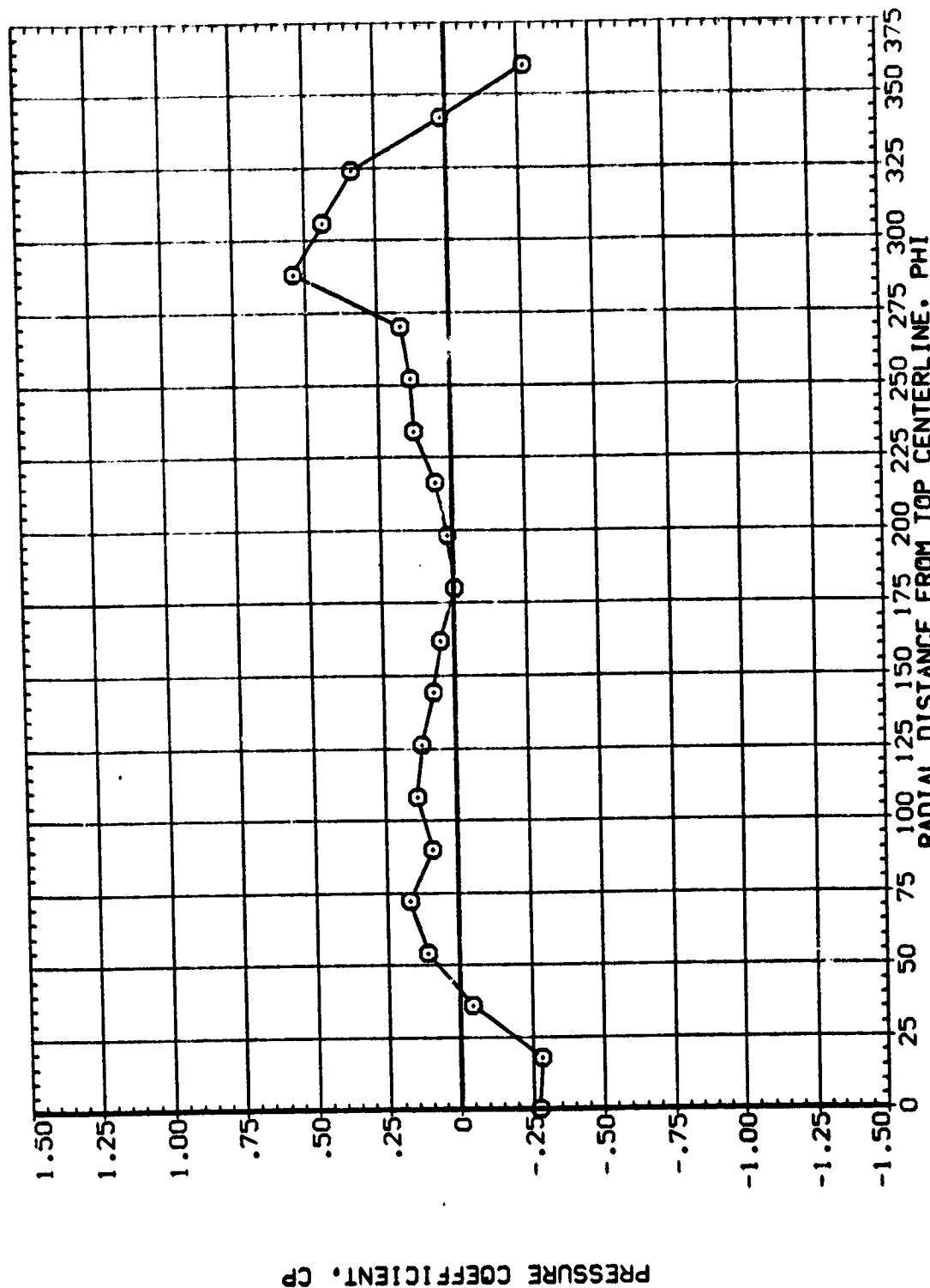
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REFERENCE DATA  
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BREF 5.313  
XPRP 2.548  
YPRP .000  
ZPRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

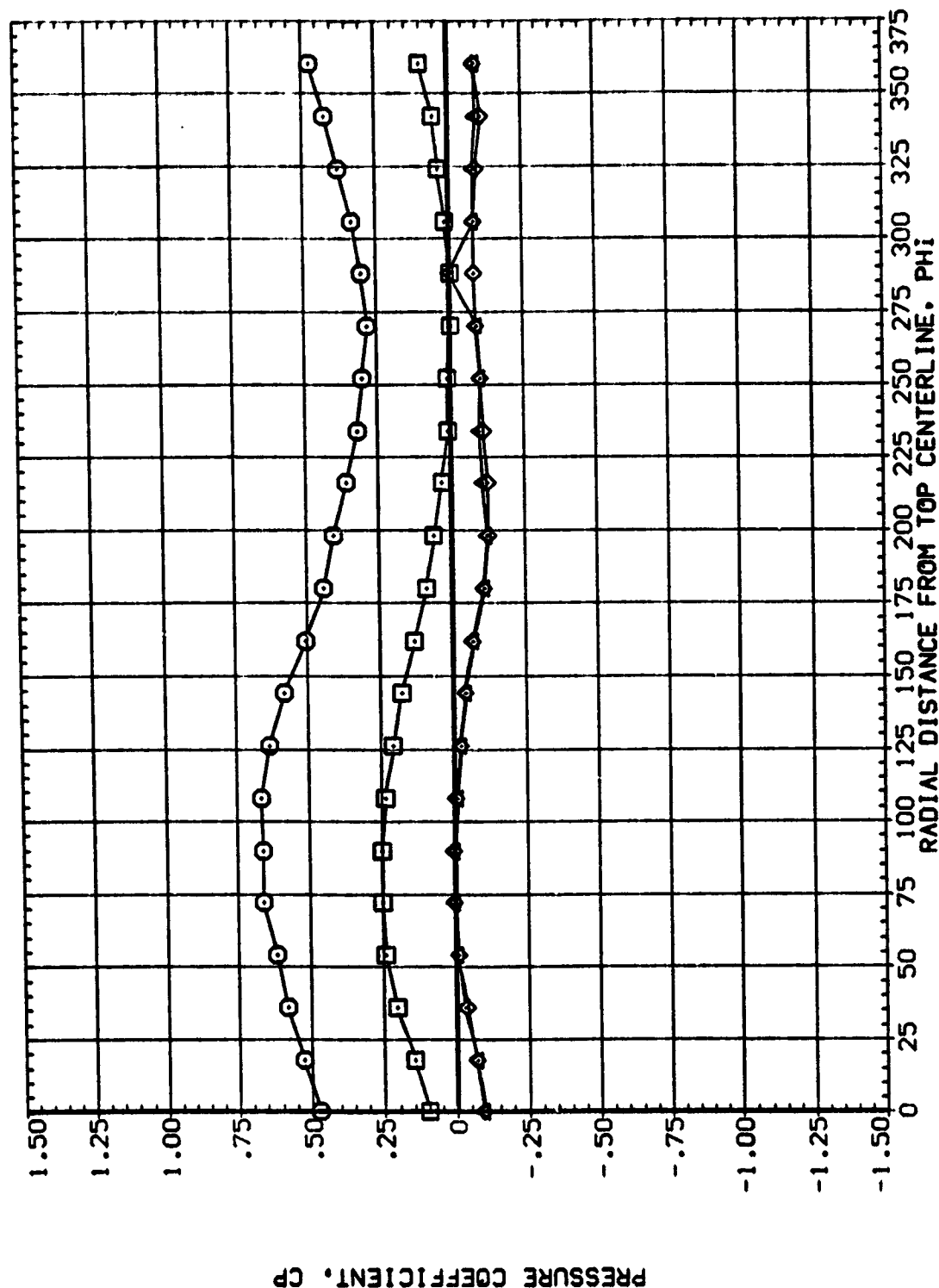
PARAMETRIC VALUES  
.000 CONF IG  
.140 RUDDER  
.000 ORB IN C  
.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 0C EXTERNAL TANK(A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	50. IN.	ALPHA	CONFIG	90.000
○	.076	-8.000	1.960	LREF	5.313	IN.	DELTA Z	RUDER	.000
◇	.155			BREF	5.313	IN.	X-SRB	ORBIT	.500
□	.220			XMRP	2.549	IN.			
△	.235			ZMRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

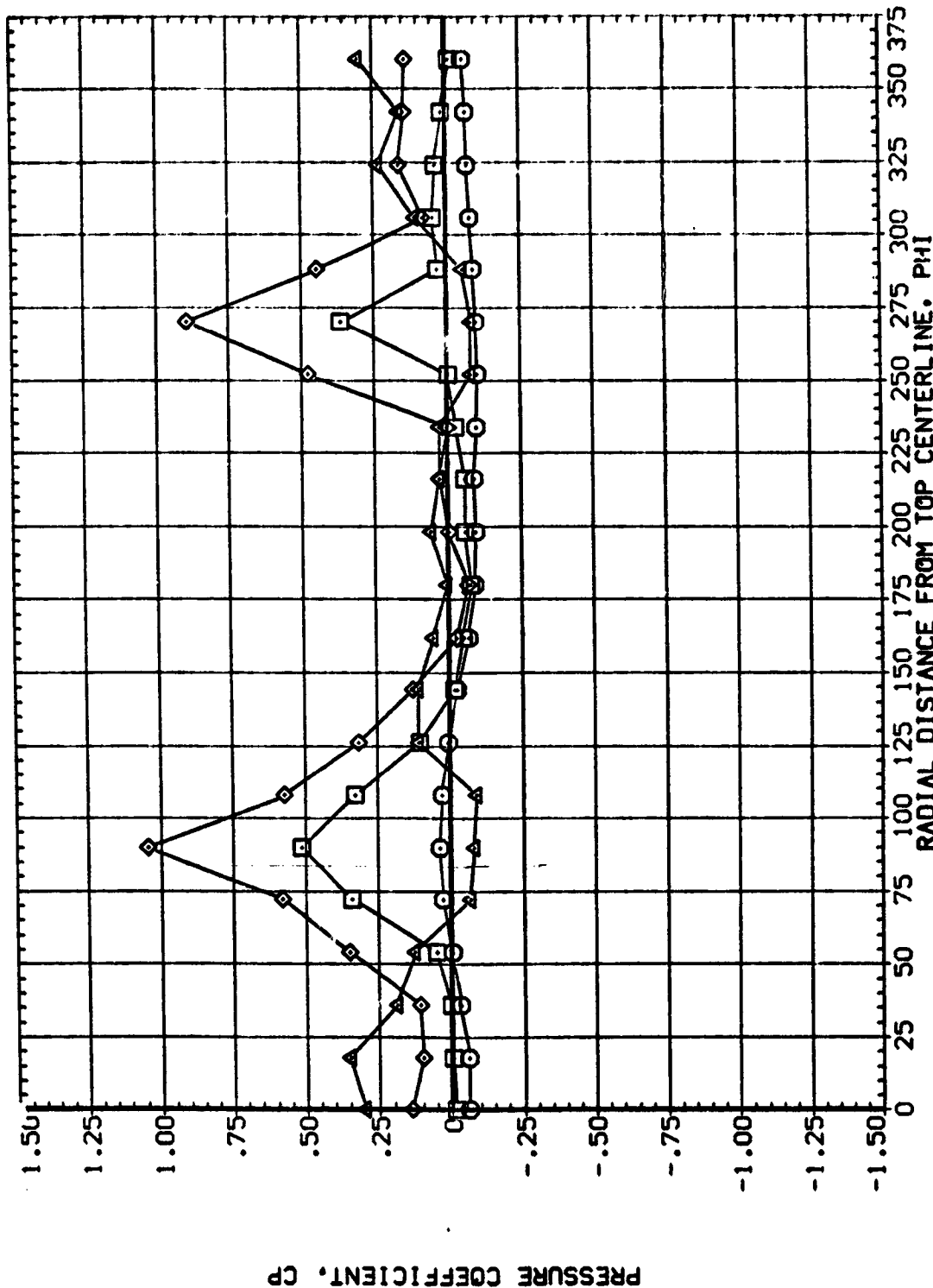
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT    BETA    MACH  
 .271    -8.000    1.960  
 .314  
 .350  
 .382

REFERENCE DATA  
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 LREF    5.313  
 BREF    5.313  
 XMRP    2.549  
 YMRP    .000  
 ZMRP    .000

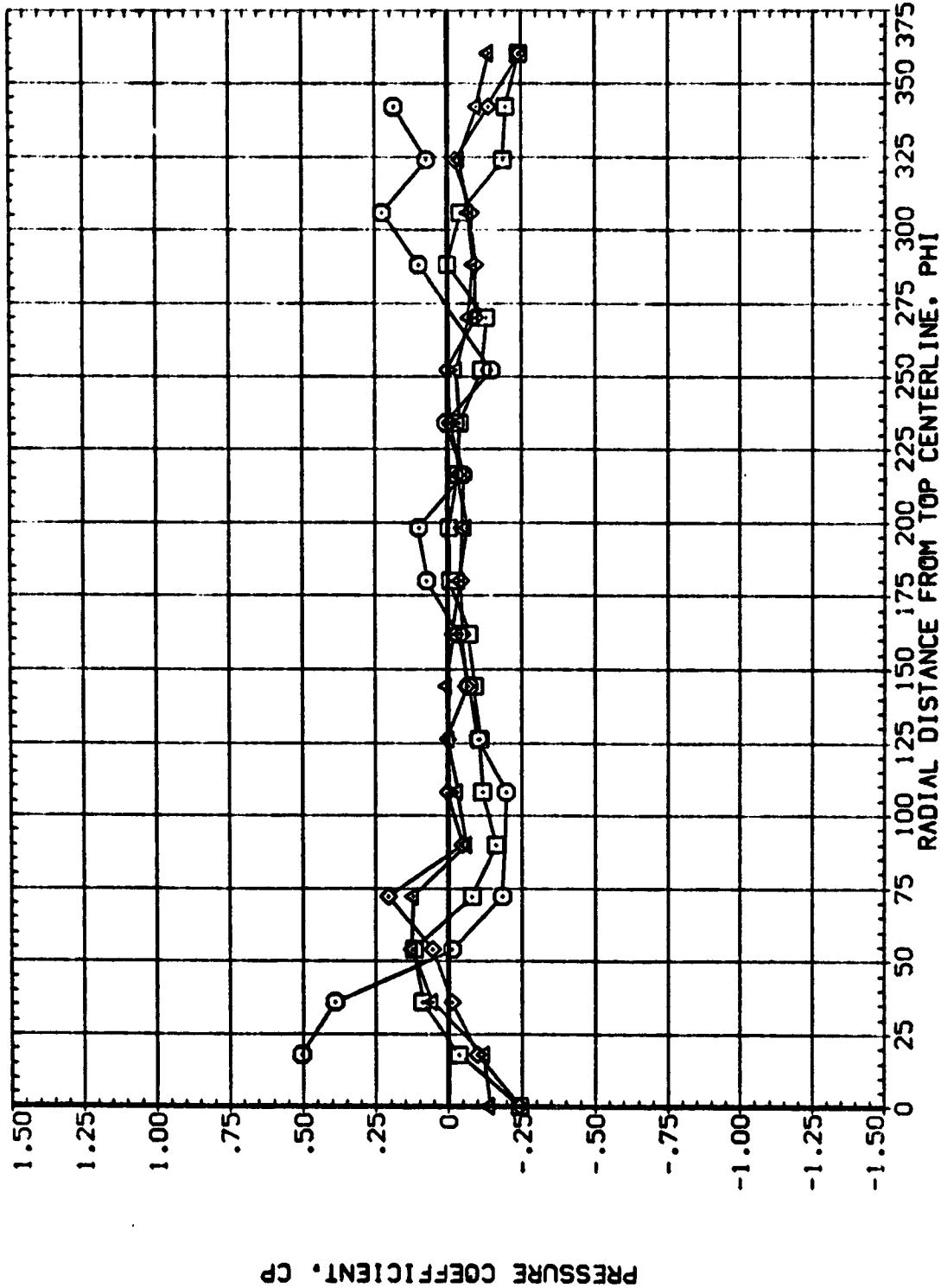
PARAMETRIC VALUES  
 .000    CONF IG    90.000  
 .140    RUDDER    .000  
 .000    ORBINC    .500  
 ALPHA  
 DELTA Z  
 X-SRB



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(IA32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	DELTAZ	X-SRB
○	.438	-8.000	1.960	5.198	5.313	5.313	2.549	IN.	.000	.140	.000
□	.506							IN.	.000	.000	.000
◇	.573							IN.	.000	.000	.000
△	.641							IN.	.000	.000	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

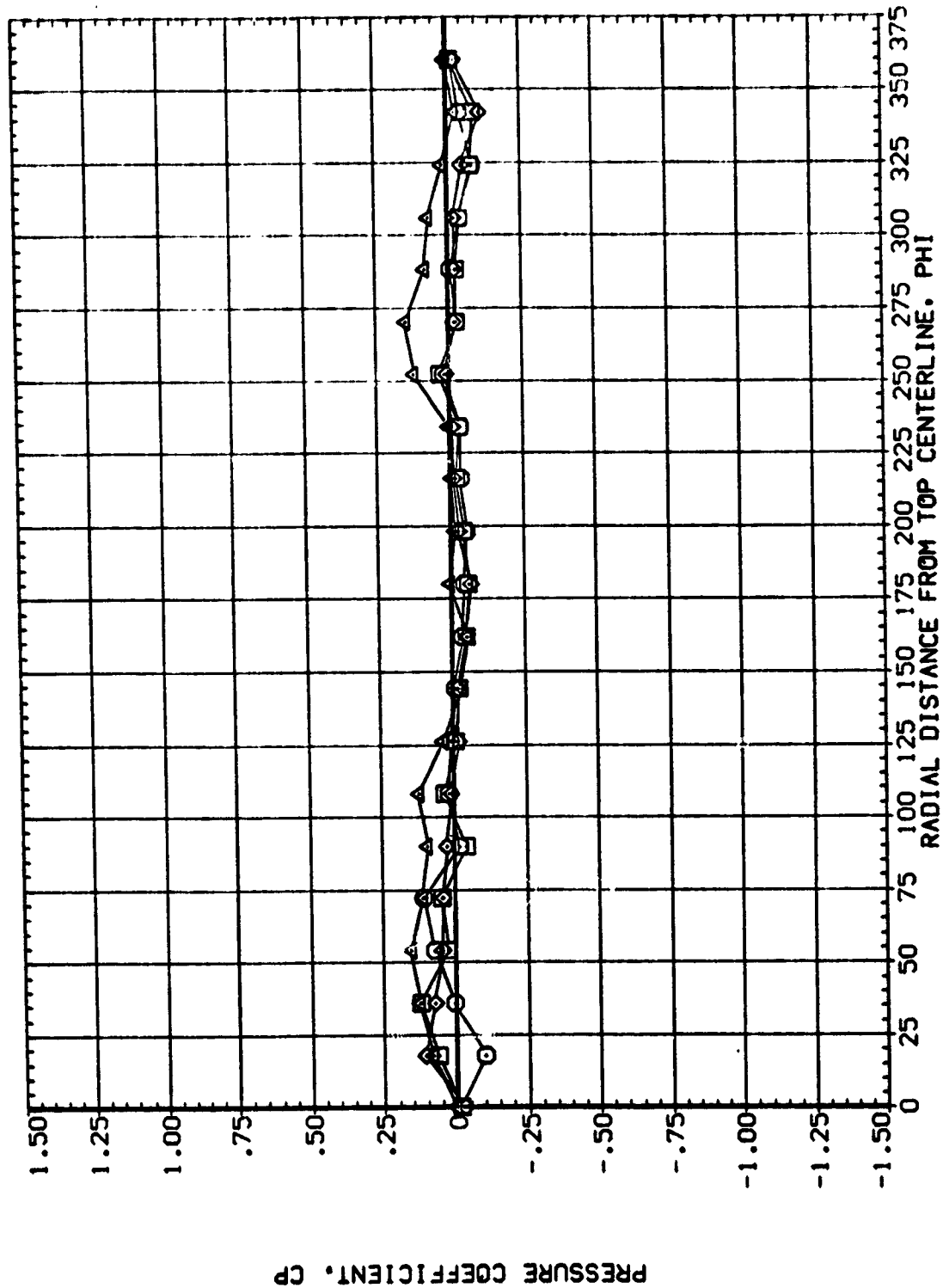
SYMBOL  
□  
◇  
△

X/LT .708  
.776  
.844  
.912

BETA -8.000  
MACH 1.560

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BREF 5.313  
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YMRP .000  
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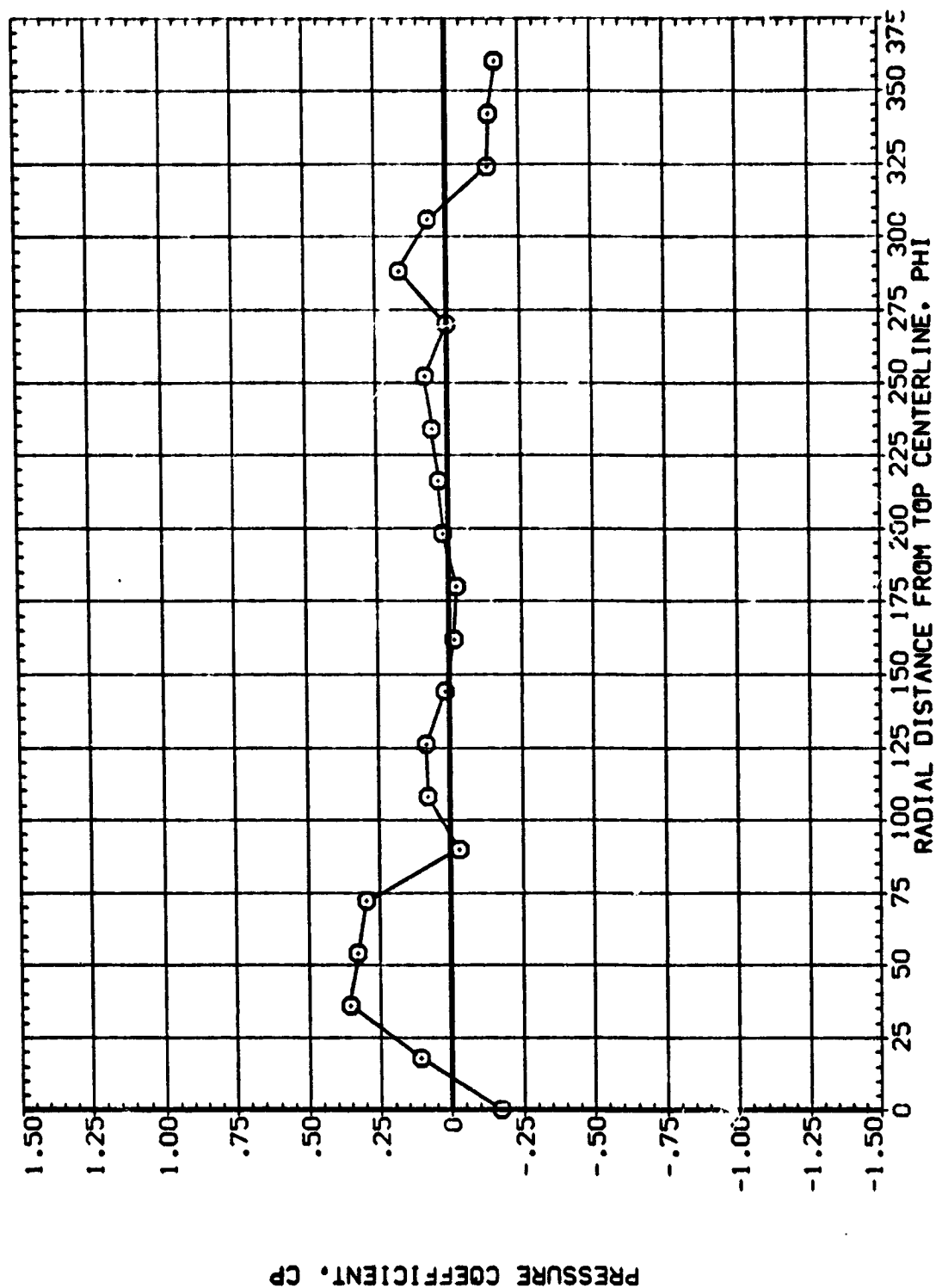
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DELTAZ .140  
X-SRB .000  
Y-SRB .000  
Z-SRB .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

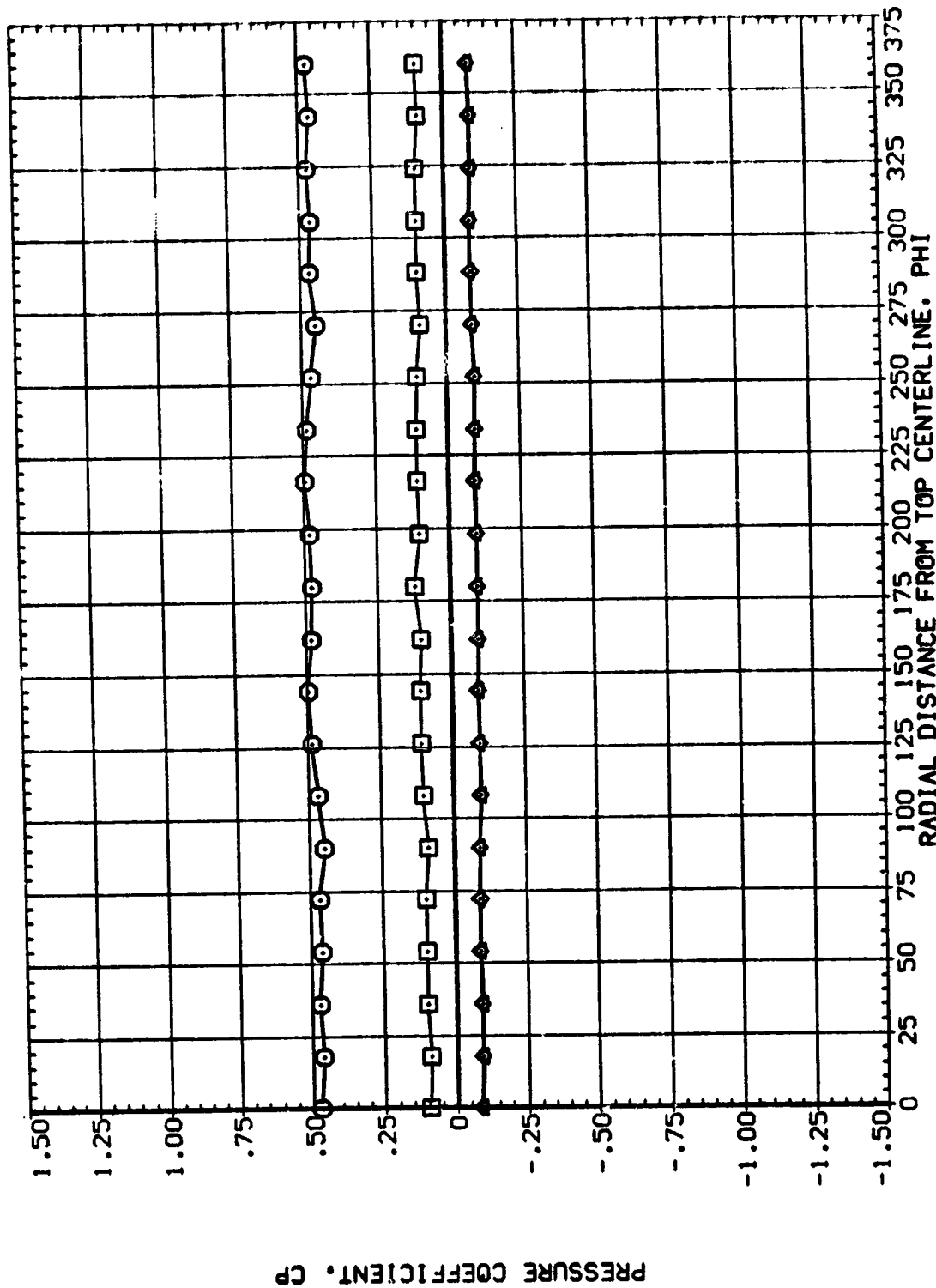
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O	.594	-8.000	1.560	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
								IN.	X-SRB	.140	.000
								IN.		.000	.500
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.076	.000	1.960	SREF 6.198	.000 CONF IG
□	.155			LREF 5.313	.000 RUDDER
◇	.220			BREF 5.313	.140 DRB INC
△	.235			YMRP 2.549	
				ZMRP .000	
					90.000
					.000
					.500

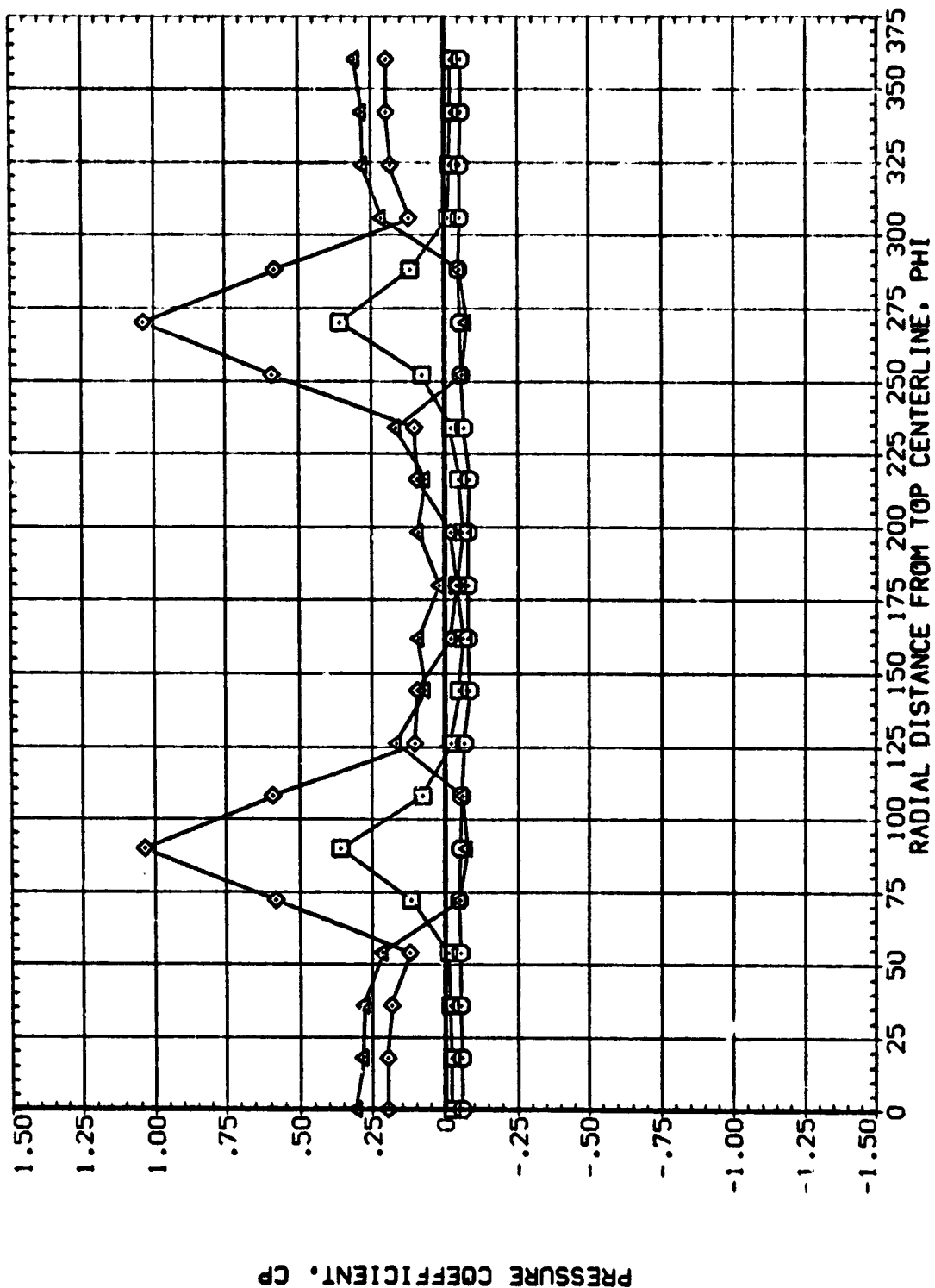


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

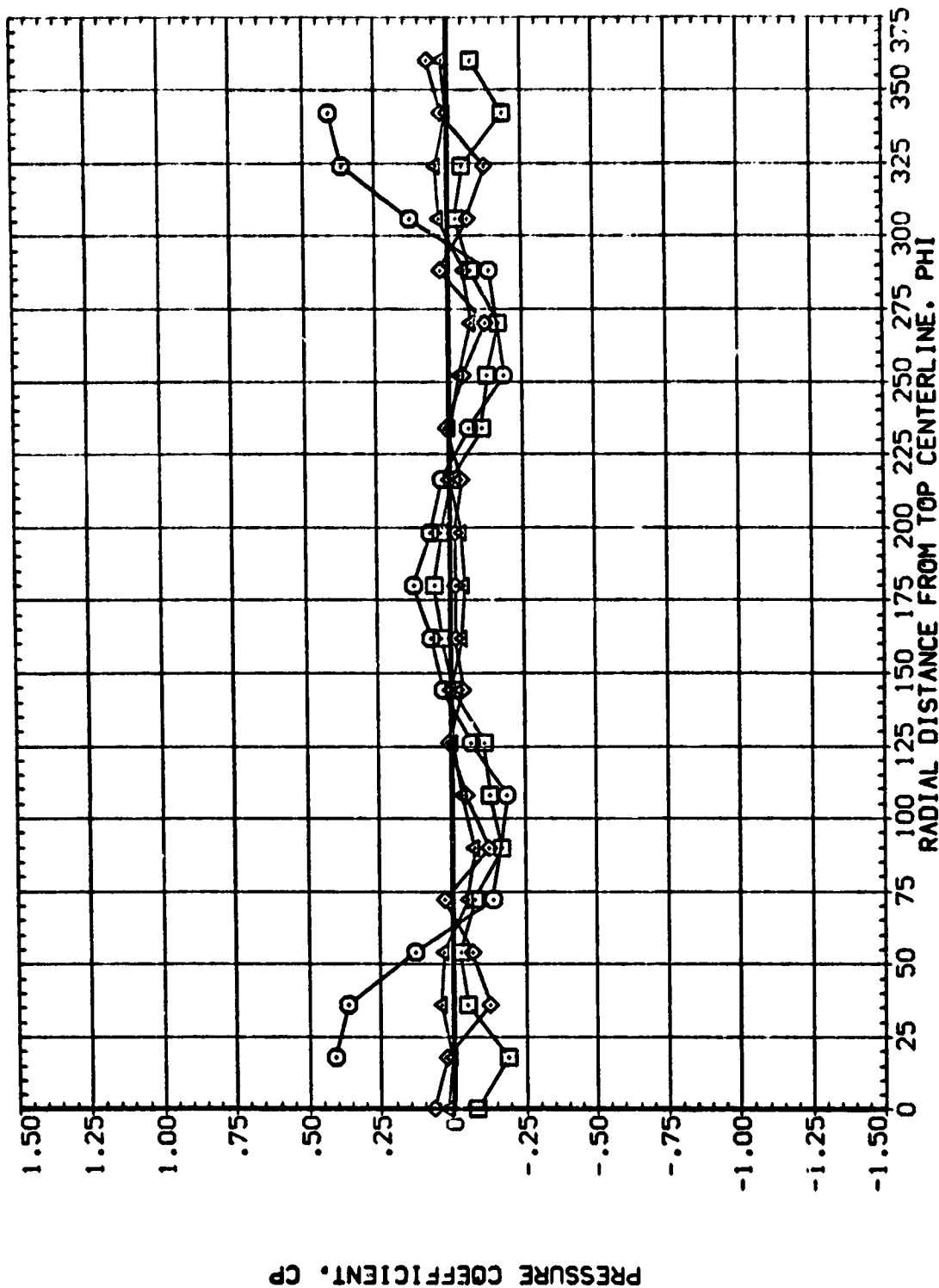
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○	.271	.000	1.960	SREF 6.198	.000 CONF1G 90.000
□	.314			LREF 5.313	.140 RUDDER .000
◇	.350			BREF 5.313	.000 DRBINC .500
△	.362			XMRP 2.549	
				YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

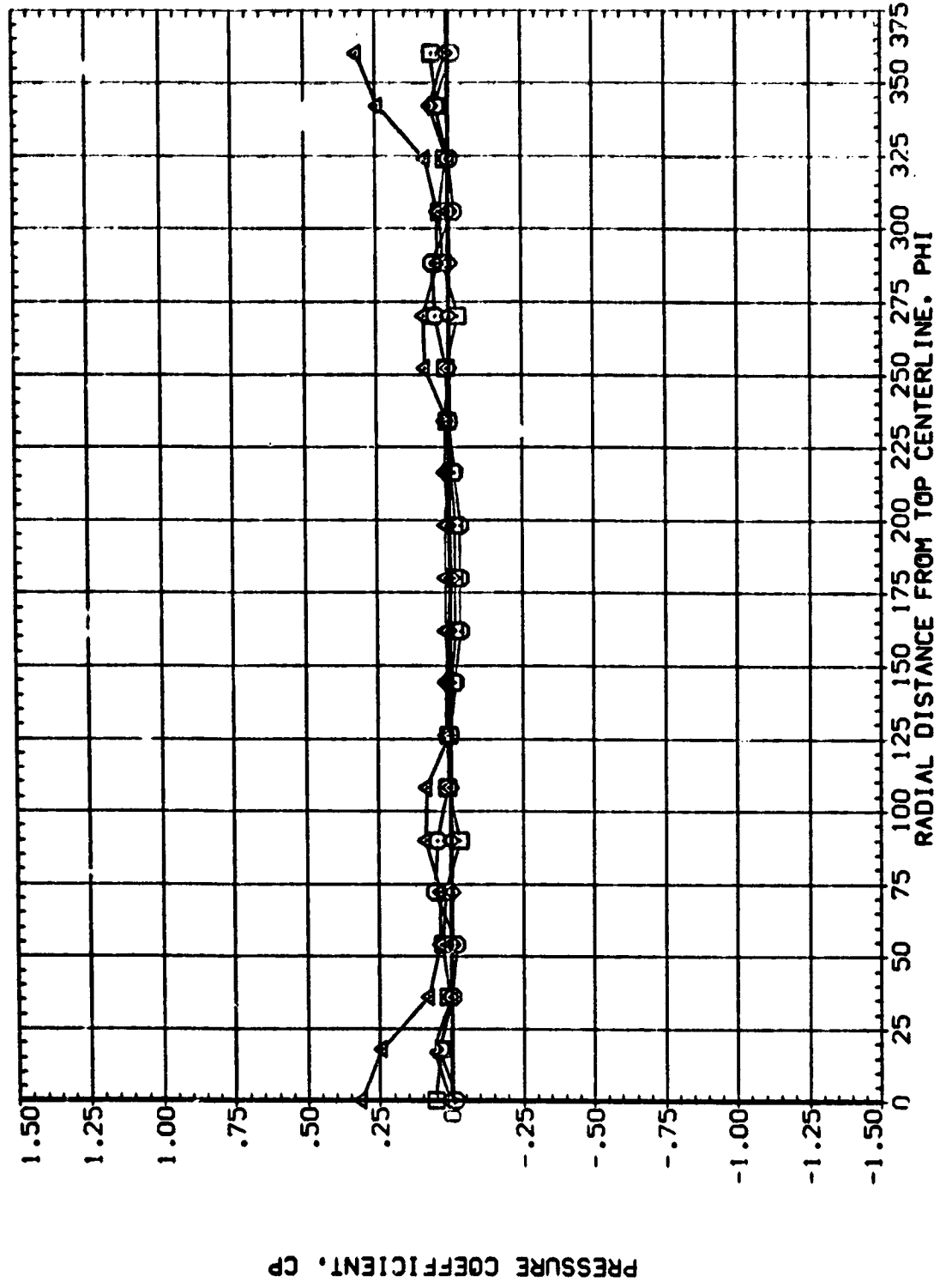
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.438	.000	1.960	SREF 6.198	.000 CONF IG
□	.506			LREF 5.313	.140 RUDDER
◇	.573			BREF 5.313	.000 ORB INC
△	.641			XREF 2.549	
				YREF .000	
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

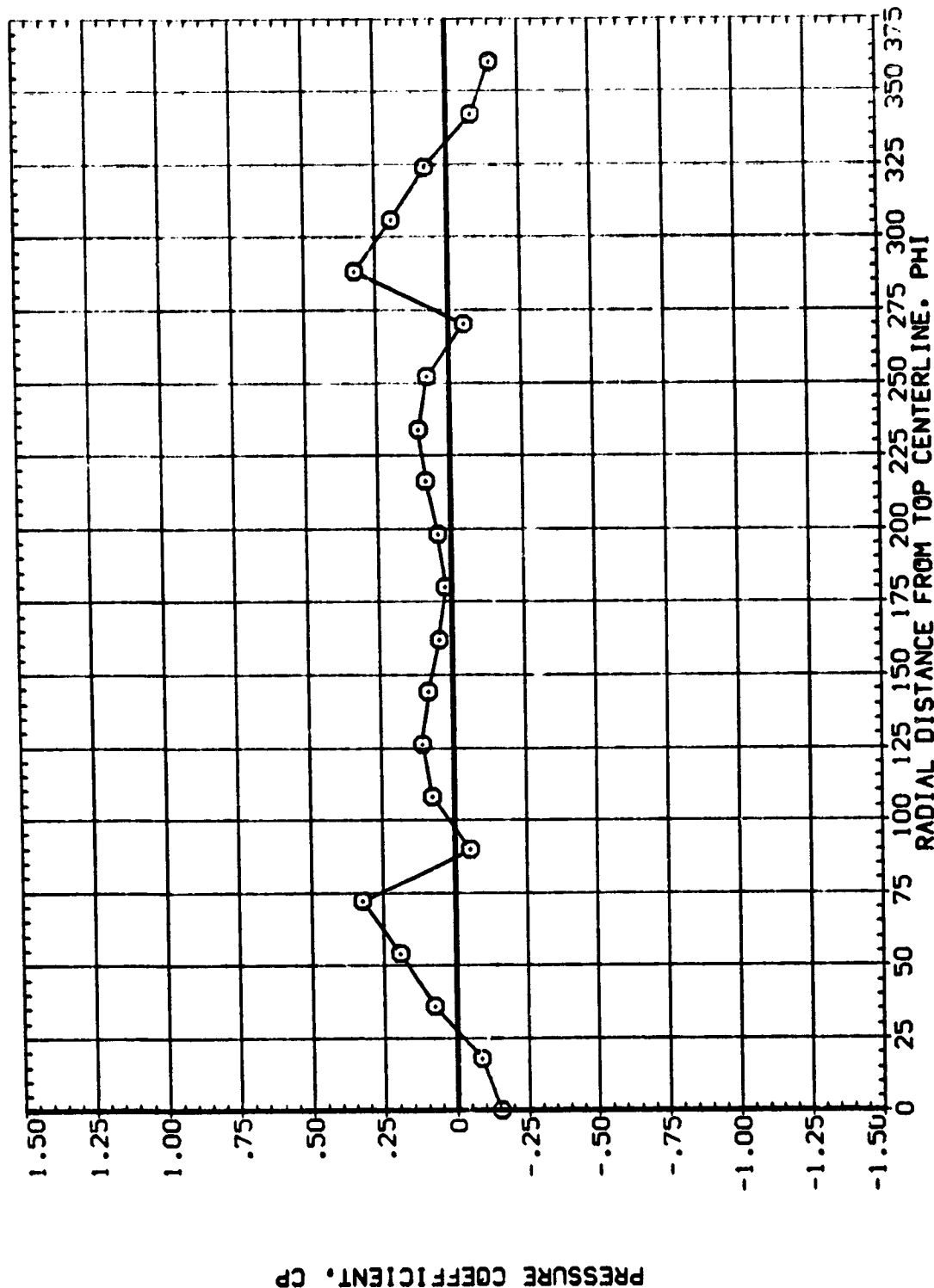
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	DELTA Z	CONFIG
□	.708	.000	1.960	5.198	5.313	5.313	2.549	IN.	.000	.140	RCDER
◇	.776							IN.	.000	.000	ORGINC
△	.844							IN.			
▽	.912							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

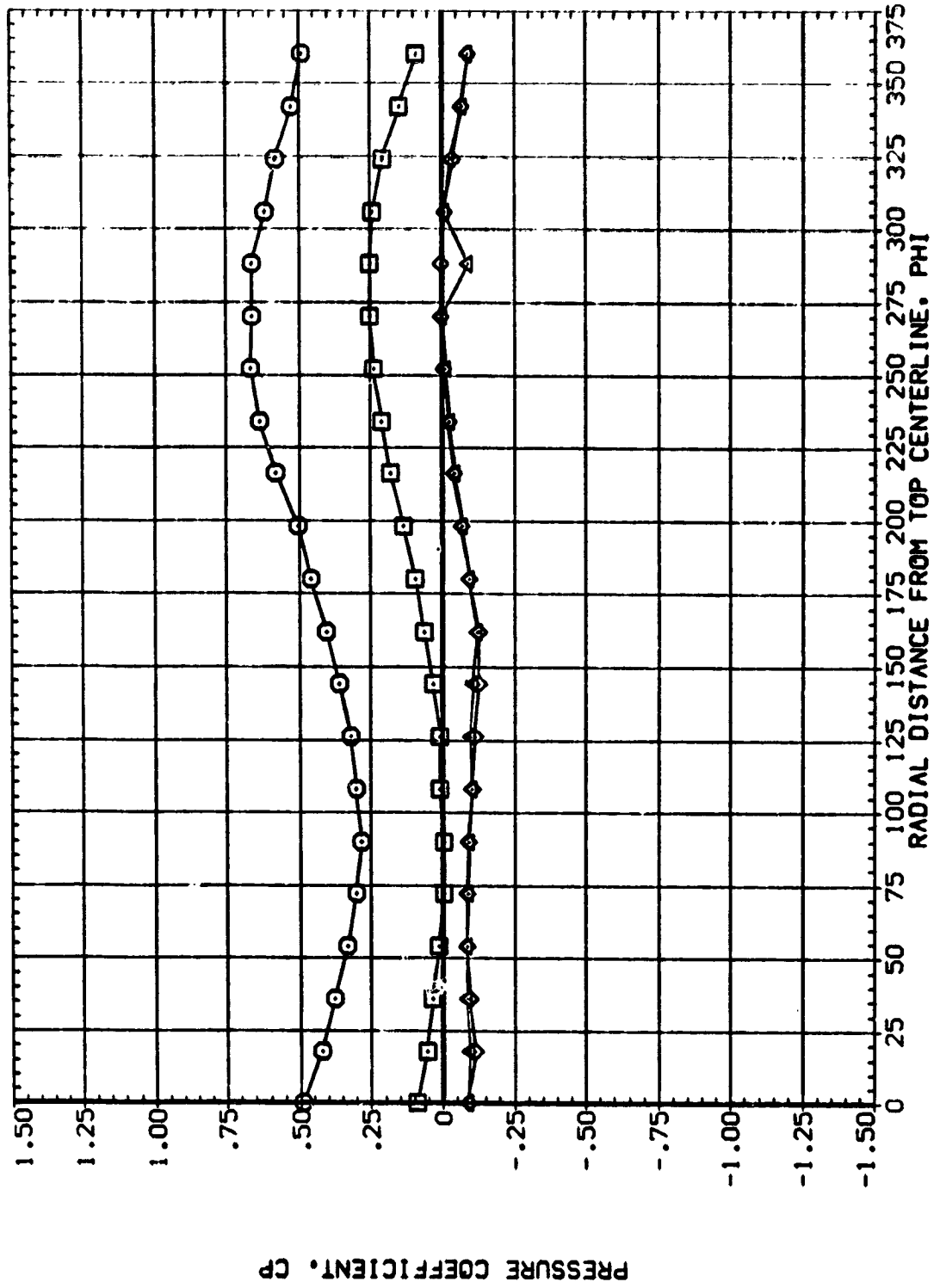
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
0	.984	.000	1.960	SREF 6.198 LREF 5.313 BREF 5.313 XMRP 2.549 YMRP .000 ZMRP .000	CONF IG 90.000 RUDDER .000 ORBITAL .140 ORBITAL .000 ORBITAL .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

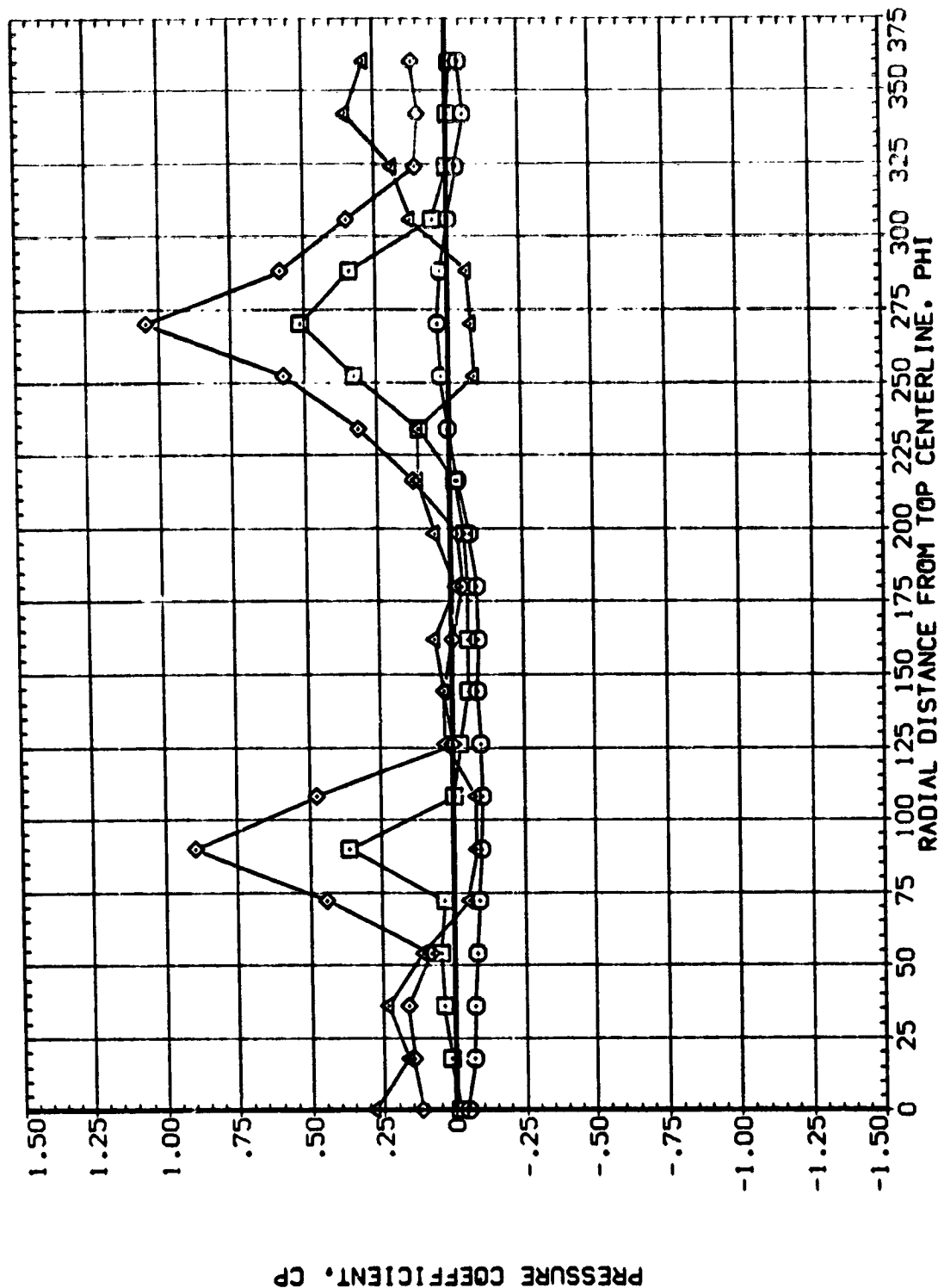
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SD. IN.	ALPHA	CONF IG
○	.076	8.000	1.960	5.198	IN.	.000	.000
□	.155			5.313	IN.	.140	.000
◇	.220			5.313	IN.	.000	.000
△	.235			2.549	IN.	.000	.500
				YMRP	IN.		
				ZMRP	IN.		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

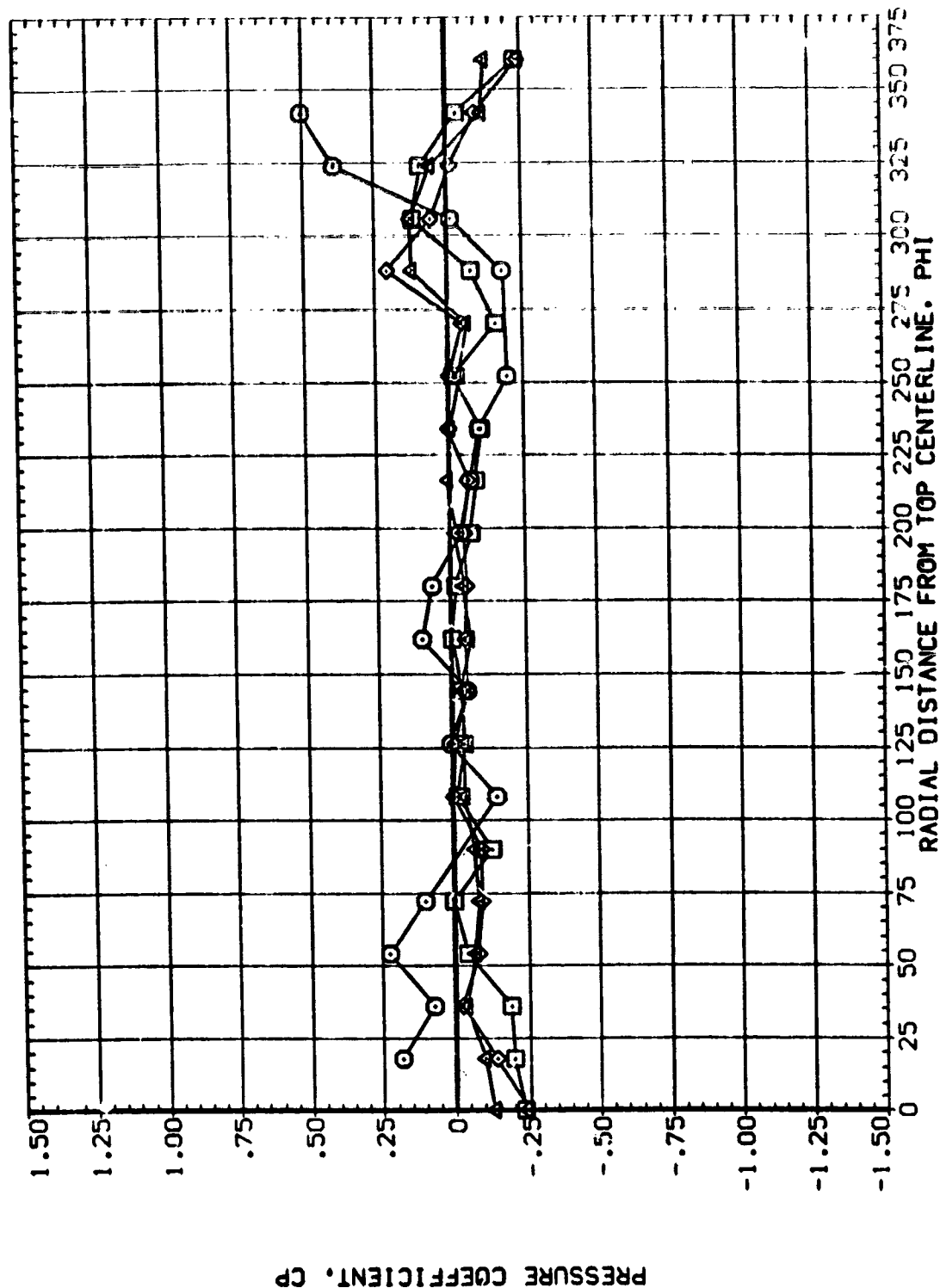
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
□	.271	8.000	1.960	SREF 6.198	CONF IG .000
◇	.314			LREF 5.313	DELTAZ .140
△	.350			BREF 5.313	RUDER .000
	.382			XMRP 2.549	DRSINC .500
				YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

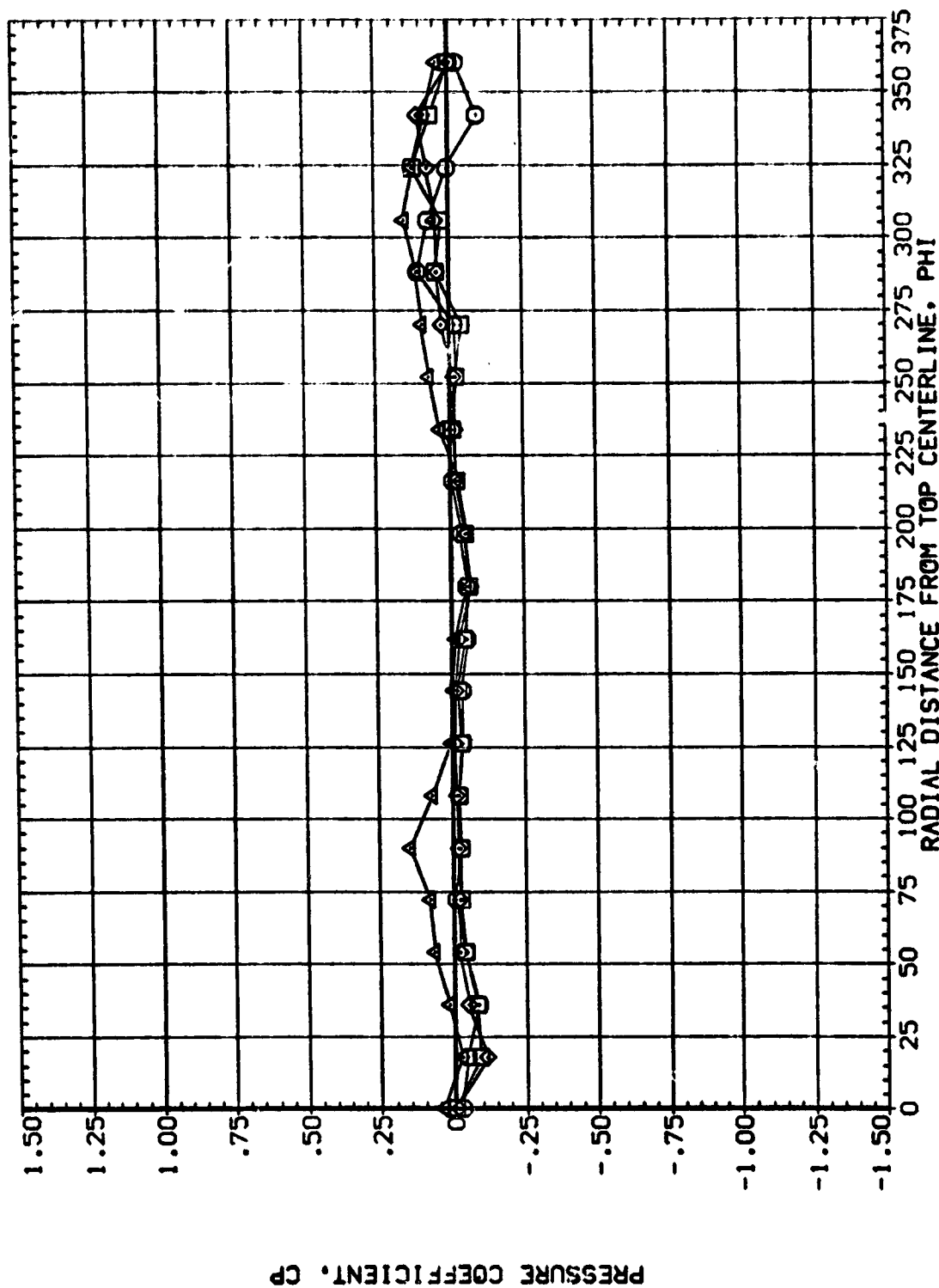
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SD. IN.	CONFIS	CONFIS	
○	.438	8.000	1.960	LREF	5.313	.000	.000	90.000
□	.506			BREF	5.313	.140	.140	.000
◇	.573			XMRP	2.549	.000	.000	.500
△	.641			ZMRP	.000			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82102)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	PREF	X0-TP	SO. IN.	ALPHA	CONF IG	90.00C
□	.708	8.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
◇	.776							IN.	X-SRB	.140	.000
△	.844							IN.		.000	.500
	.912							IN.			

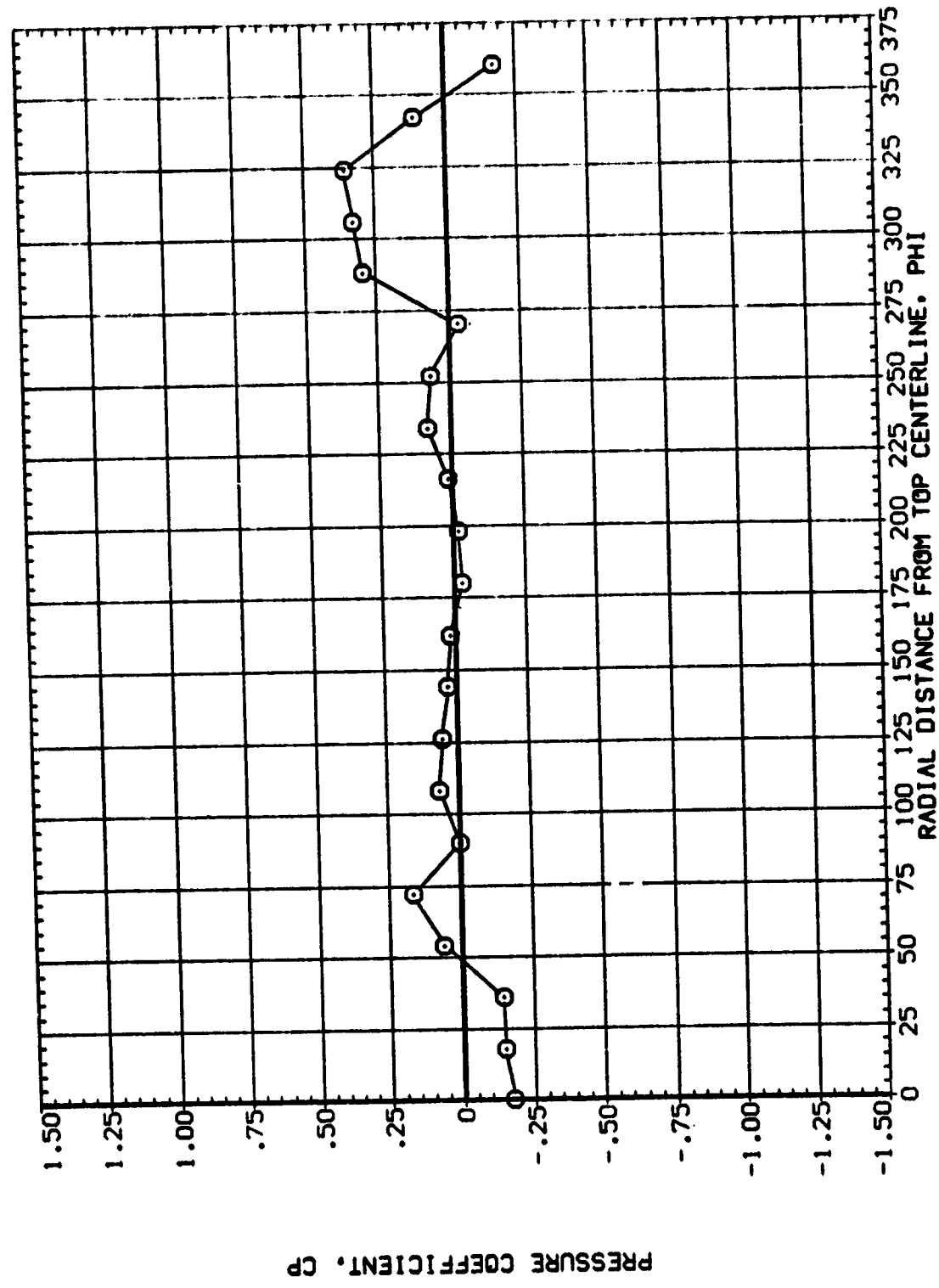


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	DELTA Z	X-SRB
0	.984	8.000	1.960	6.198	5.313	5.313	2.549	IN.	.000	.140	.000
								IN.		.000	.000
								IN.		.000	.500
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL  
 ○ □ ◇ △

X/LT .076  
 .155  
 .220  
 .235

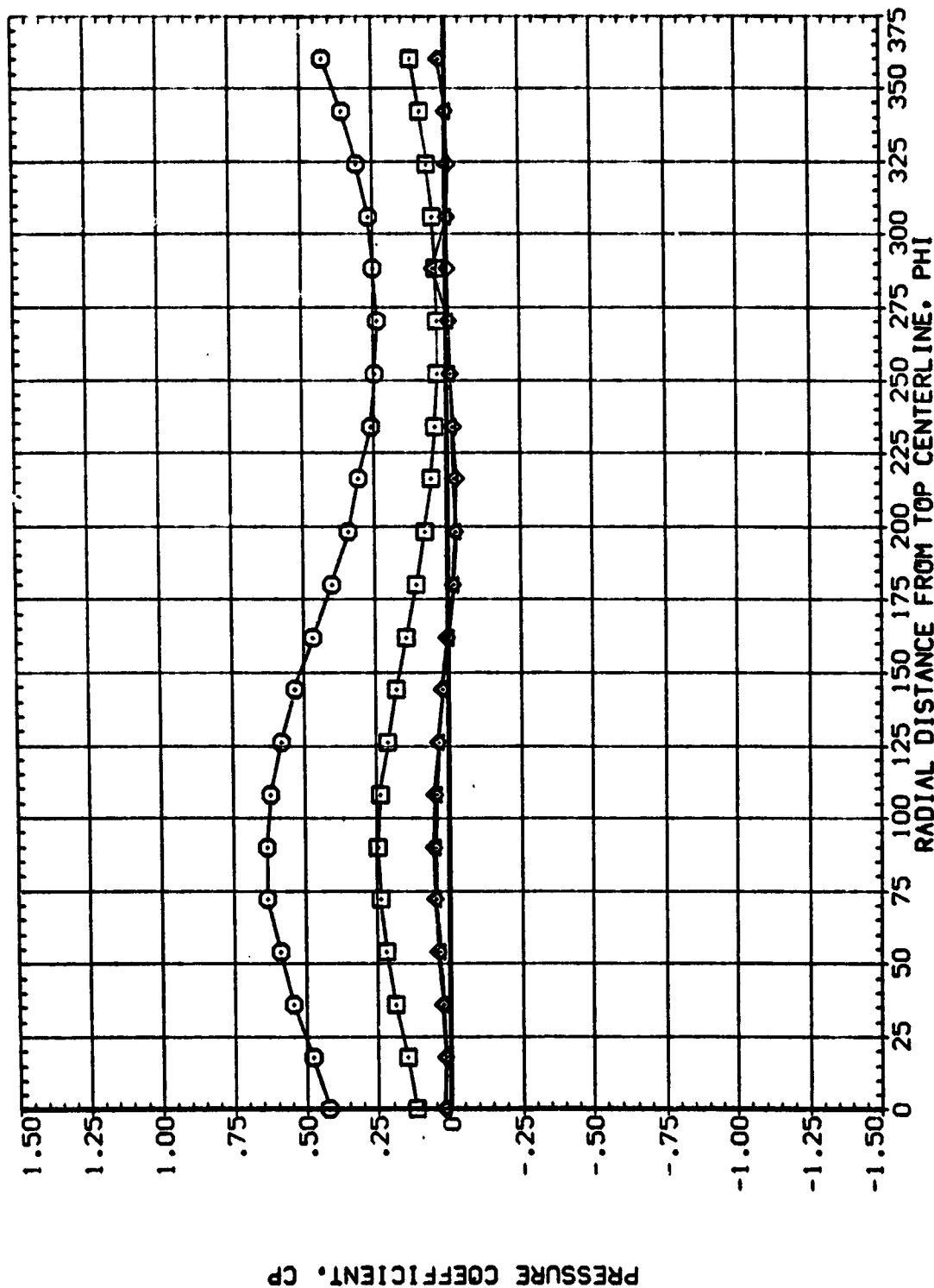
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 MACH 3.500

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

PARAMETRIC VALUES  
 .000 CONF IG  
 .140 RUDDER  
 .000 ORB INC  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL X/LT

BETA MACH

REFERENCE DATA

PARAMETRIC VALUES

90.000  
.000  
.140  
.000  
OR8INC

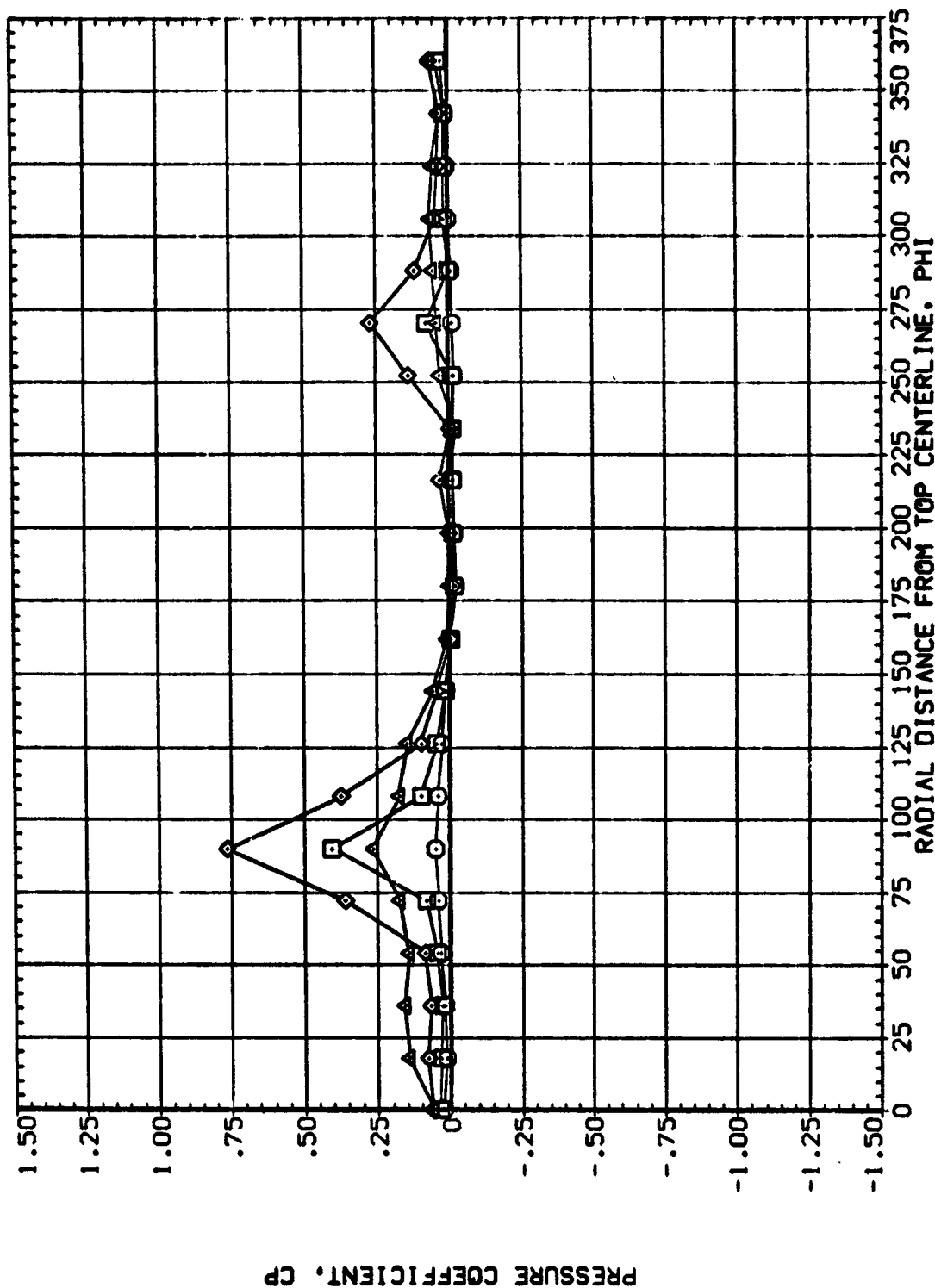
ALPHA  
DELTA Z  
X-SRB

SD. IN.  
IN.  
IN.  
IN.

SREF 6.198  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP .000  
ZPRP .000

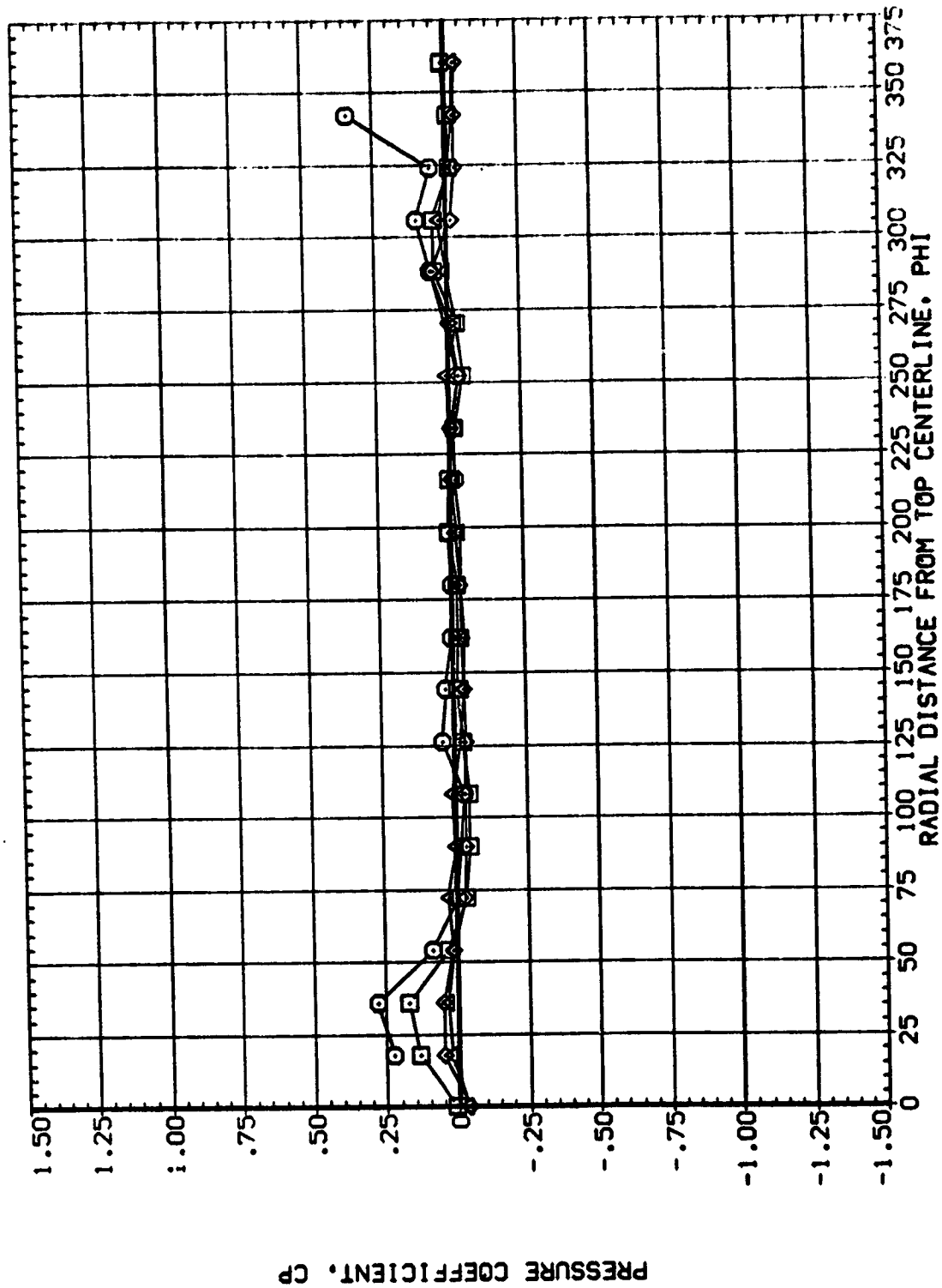
.271  
.314  
.350  
.382

CONF IG  
RUDDER  
OR8INC



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

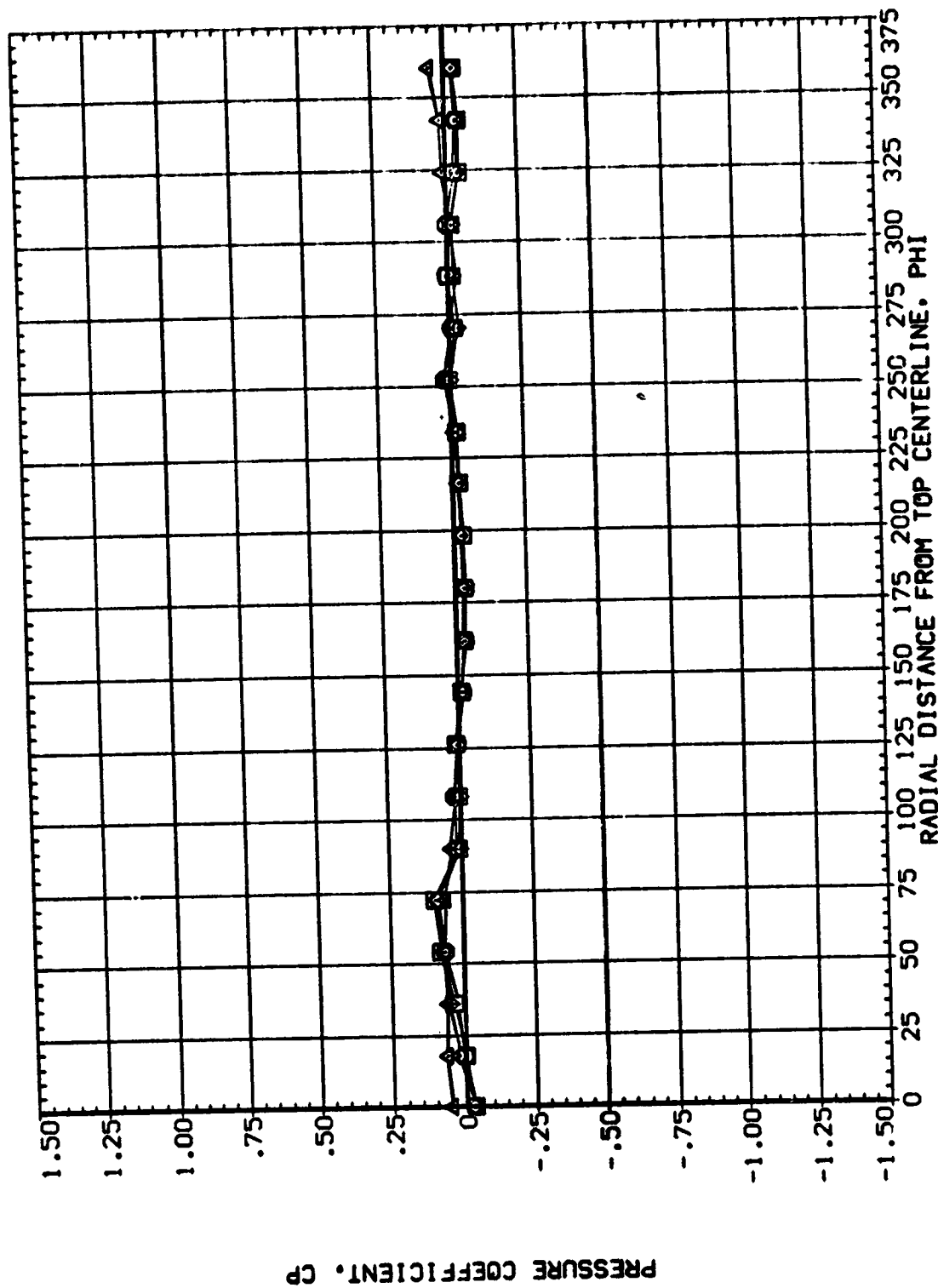
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○	.438	-8.000	3.500	SREF 6.198	.000 CONF IG
□	.506			LREF 5.313	.000 RUDDER
◇	.573			BREF 5.313	.000 ORB INC
△	.641			XREF 2.549	.000 ORB INC
				YREF .000	
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

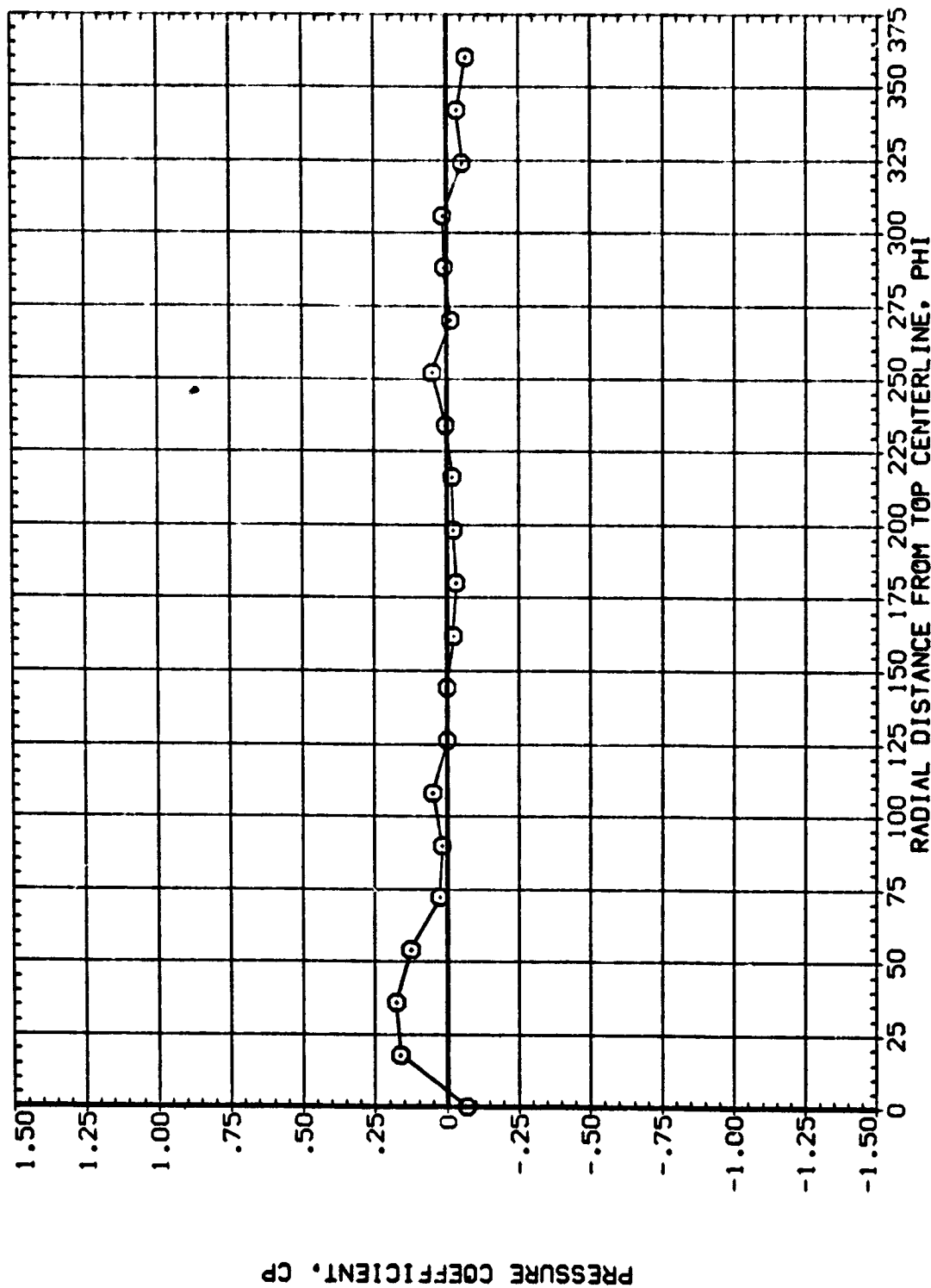
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				SREF	6.198	SO. IN.	ALPHA	CONF IG	50.000
◇	.708	-8.000	3.500	LREF	5.313	IN.	DELTA Z	RUDDER	.000
□	.776			BREF	5.313	IN.	X-SRB	ORB INC	.500
◇	.844			XRRP	2.549	IN.			
▽	.912			YRRP	.000	IN.			
				ZRRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

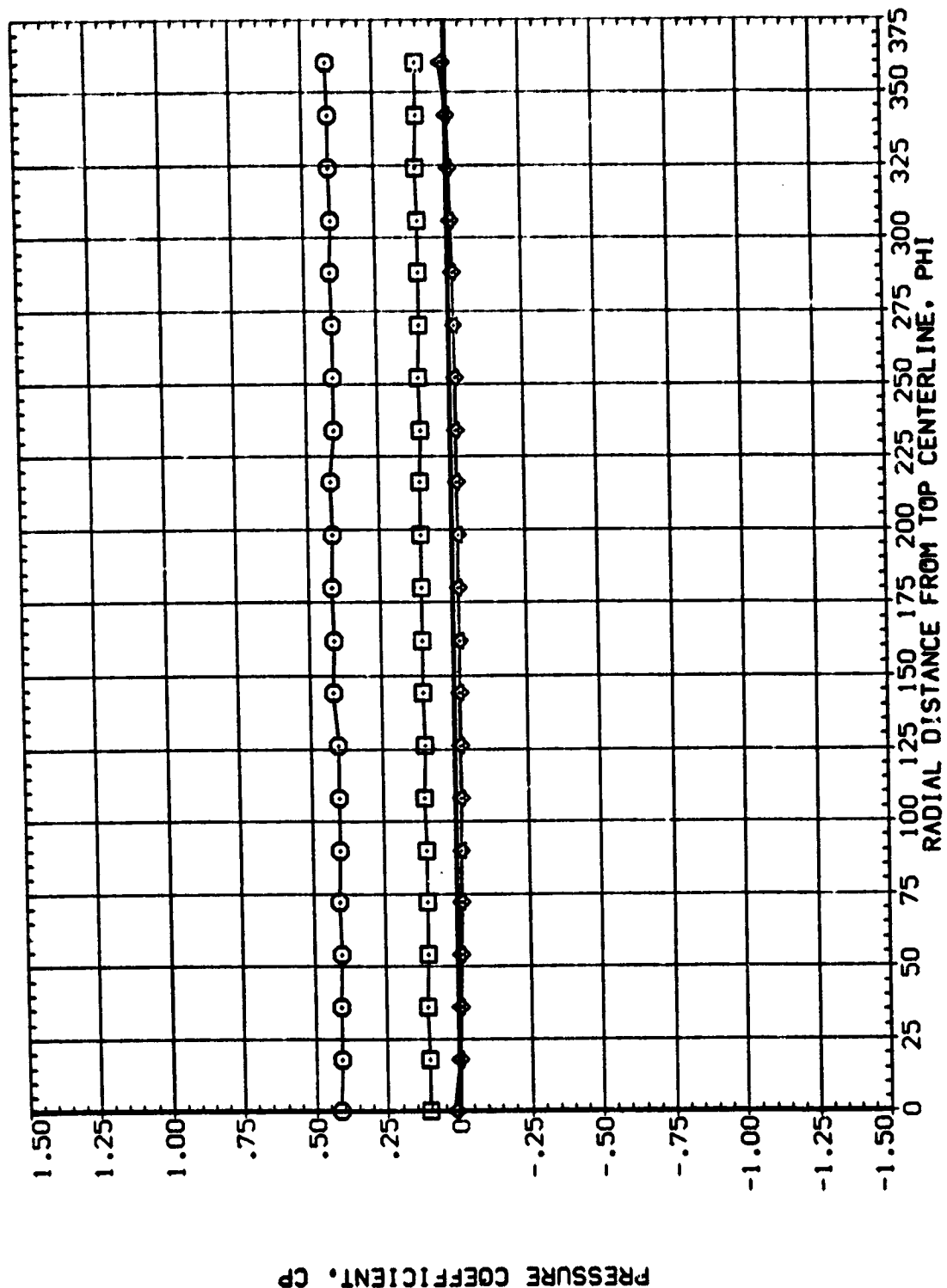
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				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	90.000
0	.994	-8.000	3.500	5.313	5.313	5.313	2.549	IN.	DELTA Z	RUDER	.000
				.000	.000	.000	.000	IN.	X-SRB	ORBIT INC	.500
				ZMRP				IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

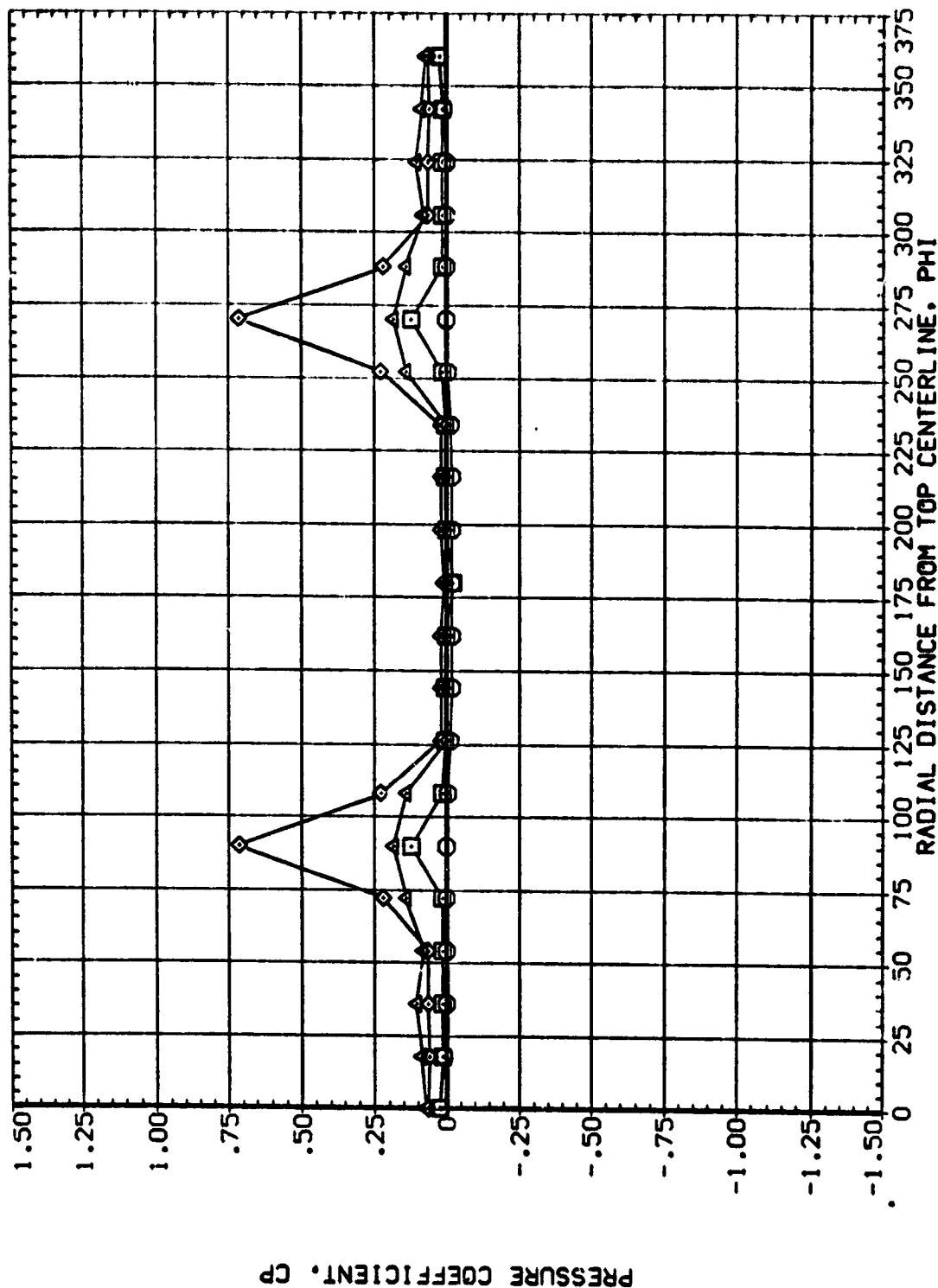
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	
○	.076	.000	3.500	6.198	3.313	3.313	2.549	IN.	DELTA Z	RUDER	90.000
□	.155							IN.	X-SRB	.140	.000
△	.220							IN.		.000	.500
▽	.235							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.271	.000	3.500	SREF 6.198	.000 CONFIG 90.000
□	.314			LREF 5.313	.140 RUDDER .000
◇	.350			BREF 5.313	.000 ORBINC .500
△	.382			XMRP 2.549	
				YMRP .000	
				ZMRP .000	



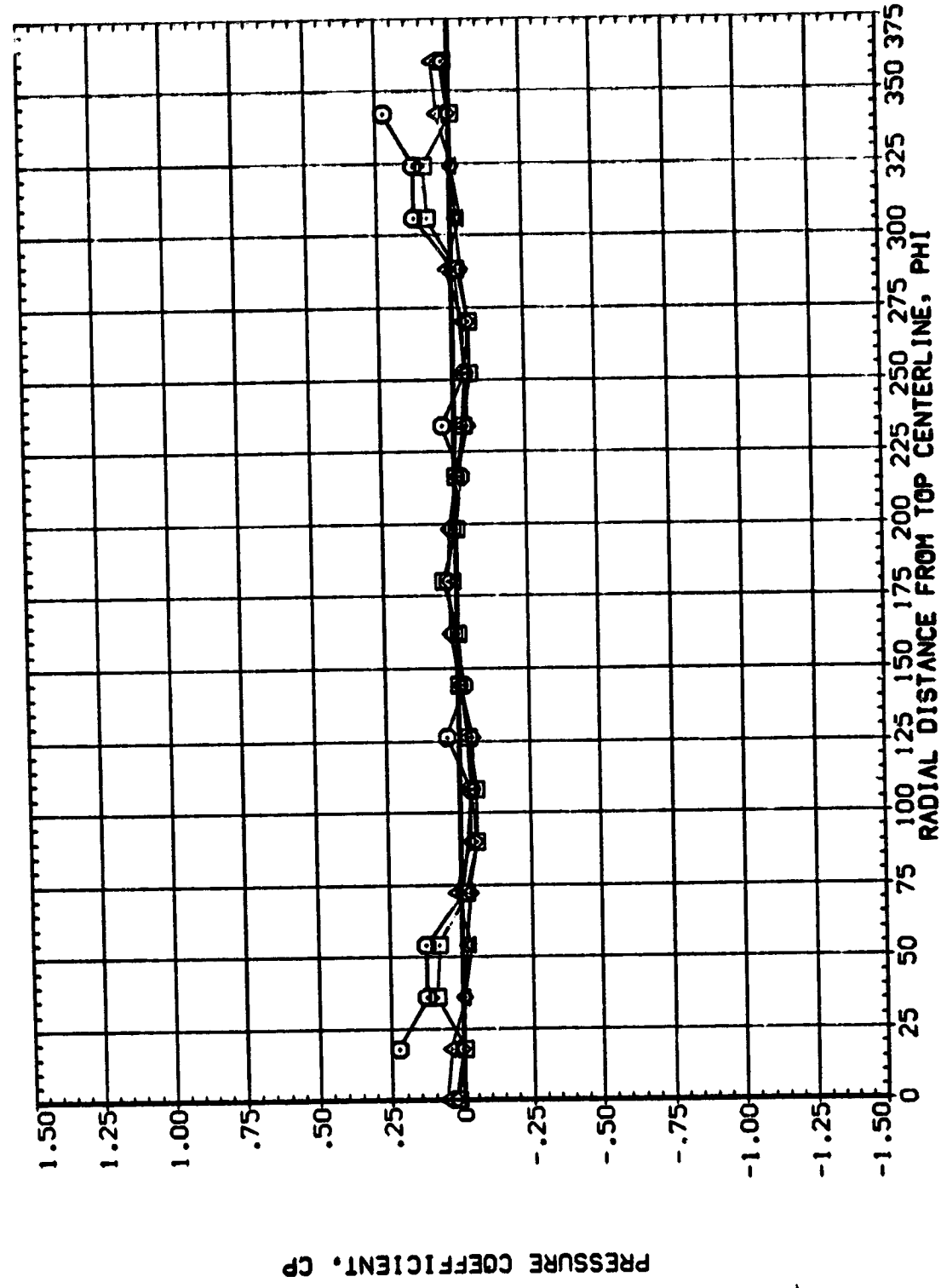
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

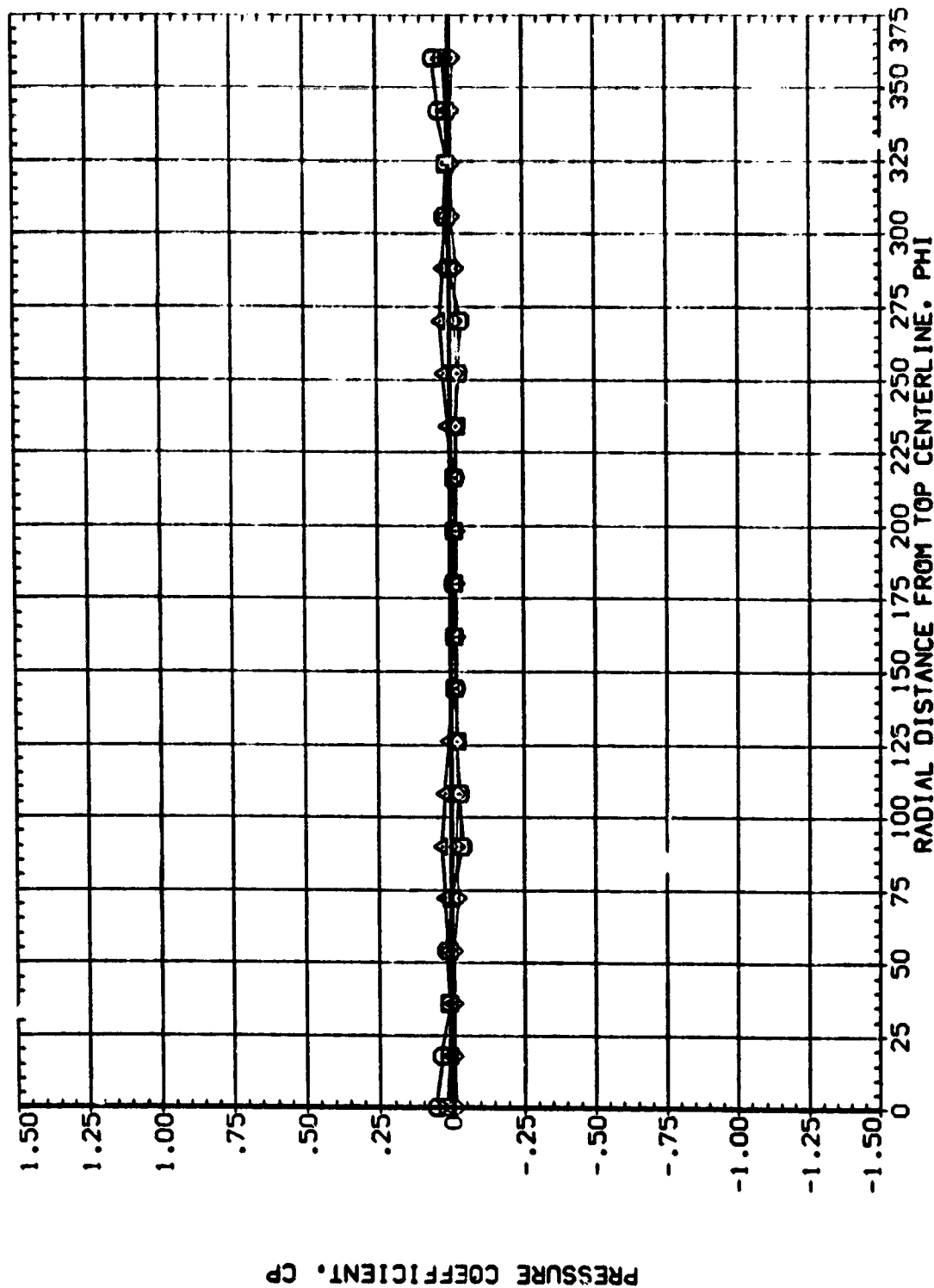
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	REF	DELTA			SREF	DELTA	CONF	IG
○	.438	.000	.000	3.500	6.198	50. IN.	.000	CONF
□	.506	.000	.000	3.500	5.313	IN.	.140	RUDER
◇	.573	.000	.000	3.500	5.313	IN.	.000	ORBIT
△	.641	.000	.000	3.500	2.549	IN.	.000	ORBIT



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.768	.000	3.500	SREF 6.198	CONFIS 50.000
□	.776			LREF 5.313	RLODR .000
◇	.844			BREF 5.313	09BINC .500
△	.912			XMRP 2.549	
				YMRP .000	
				ZMRP .000	

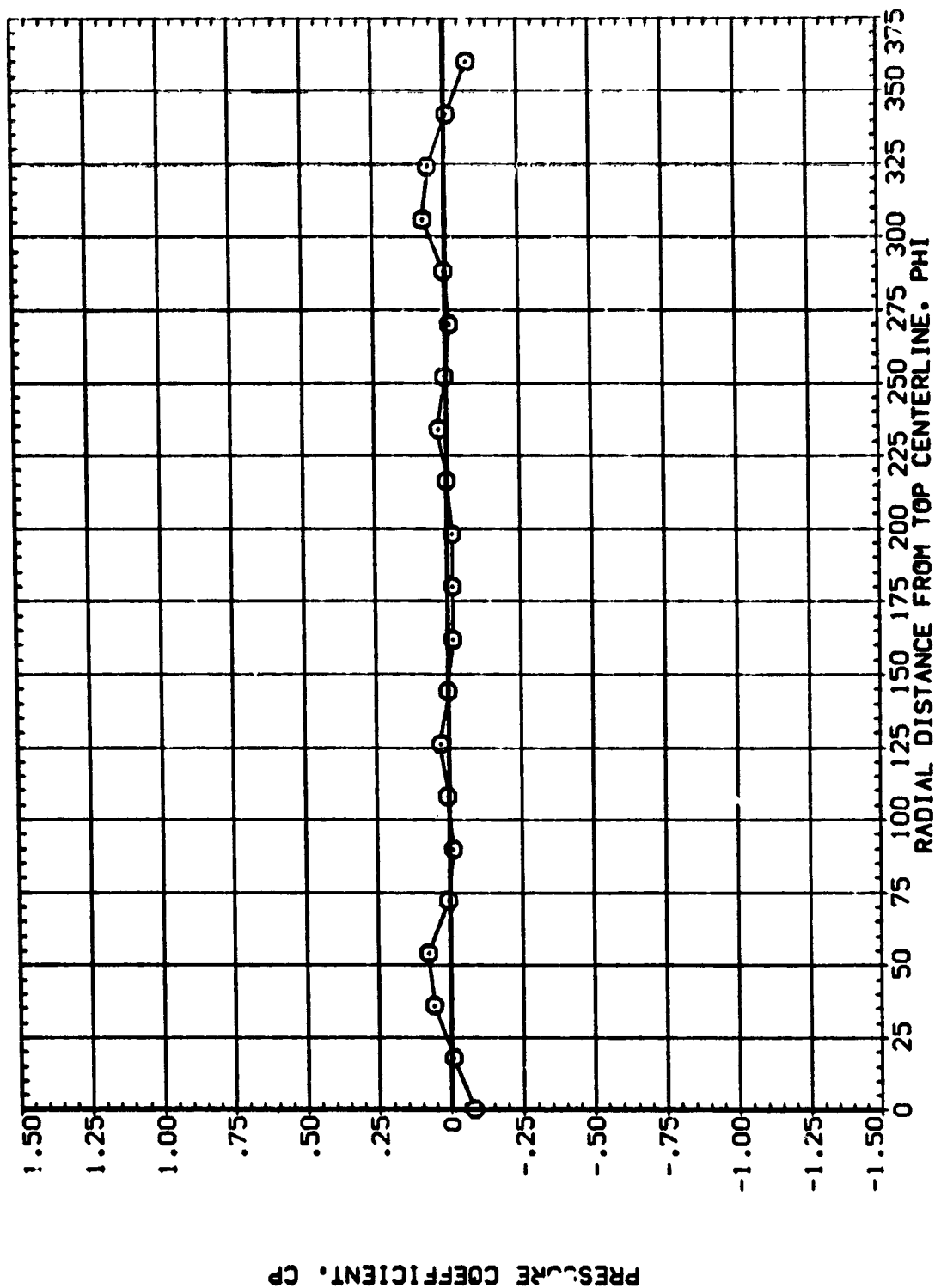


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 537(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

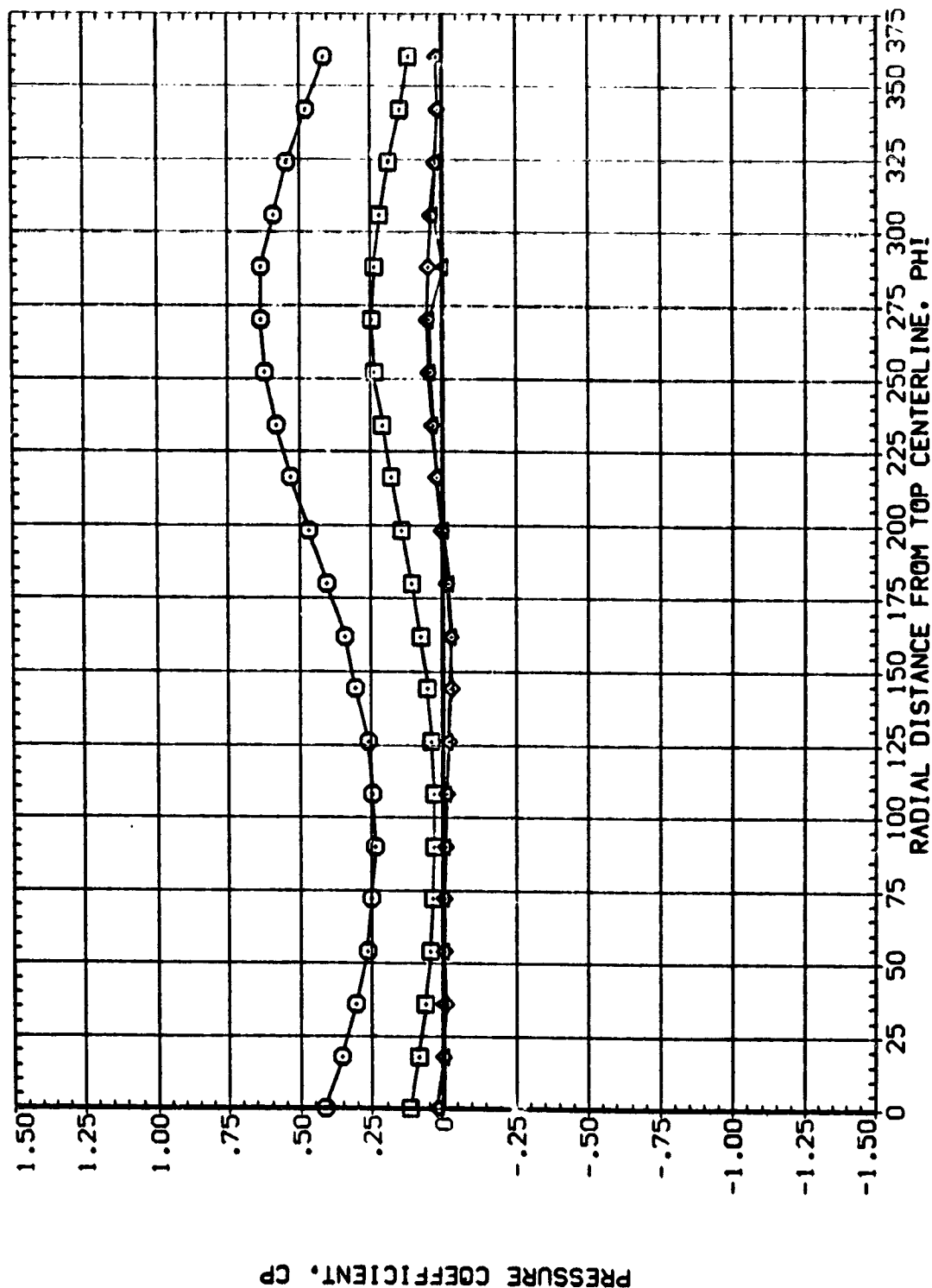
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				SREF	LREF	BREF	XPRP	SO. IN.	ALPHA	CONF IG	SO. IN.
O	.924	.000	3.500	6.198	5.313	5.313	2.549	IN.	DELTA Z	RLODER	.000
								IN.	X-SRB	.000	.000
								IN.		ORBITAL	.000
								IN.			.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

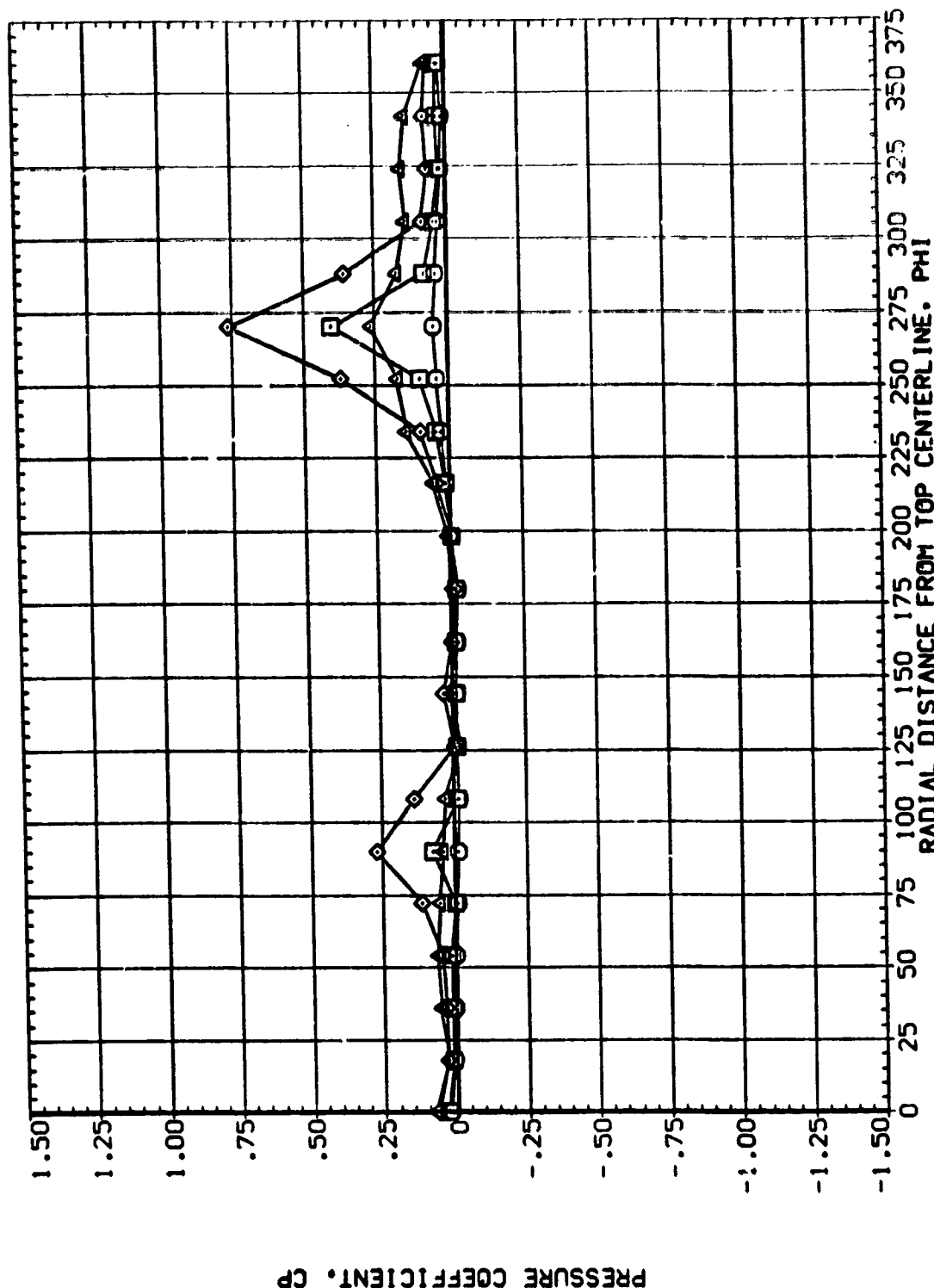
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.076	8.000	3.500	SREF 6.198	CONF IG 90.000
□	.155			LREF 5.313	RUDDER .000
◇	.220			BREF 5.313	DELTA Z .140
△	.235			YMRP 2.549	X-SRB .000
				ZMRP .000	SRB INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	SO. IN.	ALPHA	CONF IG		
○	.271	8.000	3.500	LREF	5.313	DELTA Z	.000	R/D DER	.000
□	.314			BREF	5.313	X-508	.140	098 INC	.500
◇	.350			XPRP	2.549		.000		
△	.382			YPRP	.000				
				ZPRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

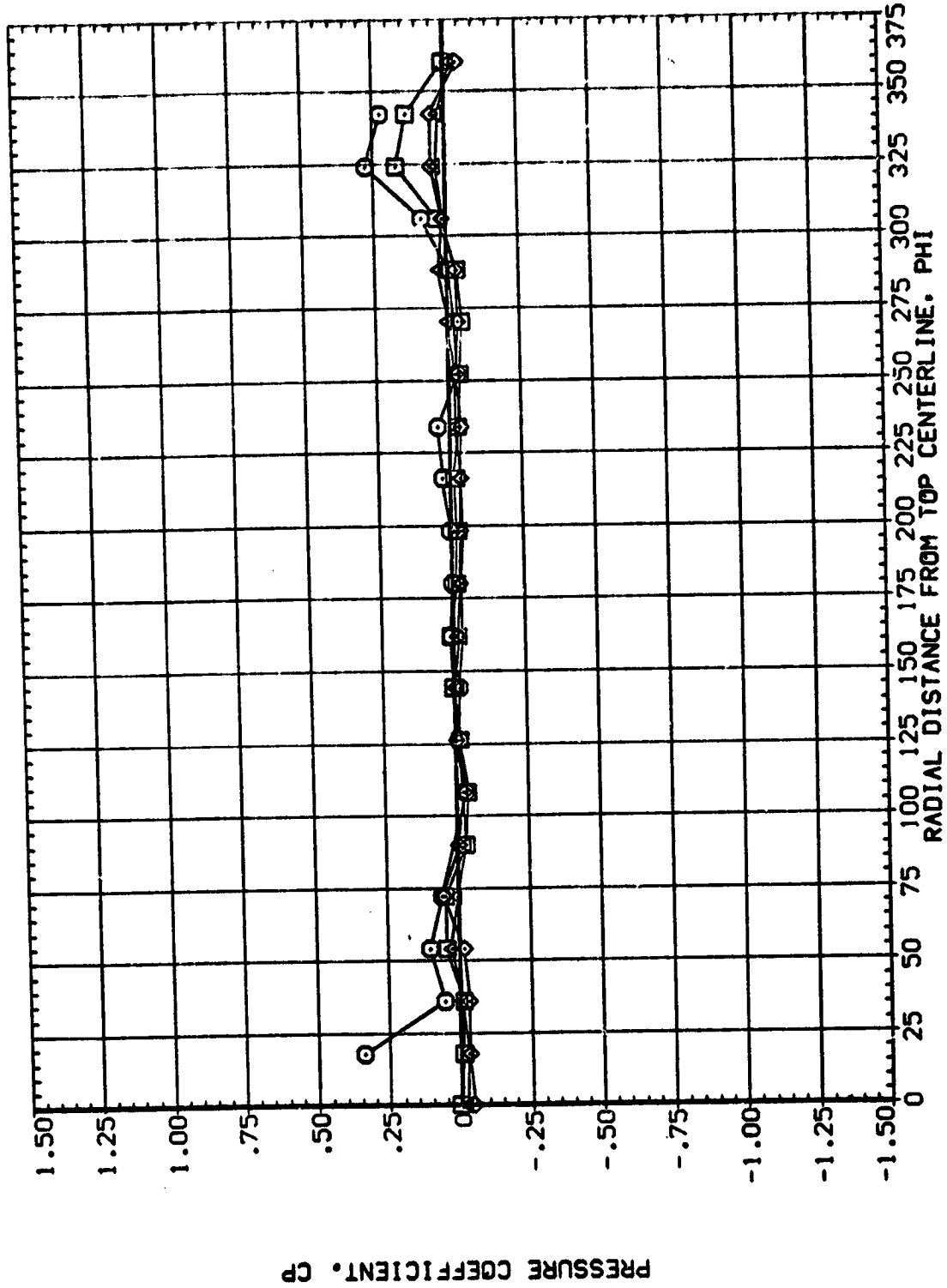
SYMBOL  
○ □ ◇ △

X/LT .438  
BETA 8.000  
MACH 3.500

REFERENCE DATA  
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BREF 5.313  
YREF 2.549  
YMRP .000  
ZMRP .000

ALPHA  
DELTA Z  
X-SRB

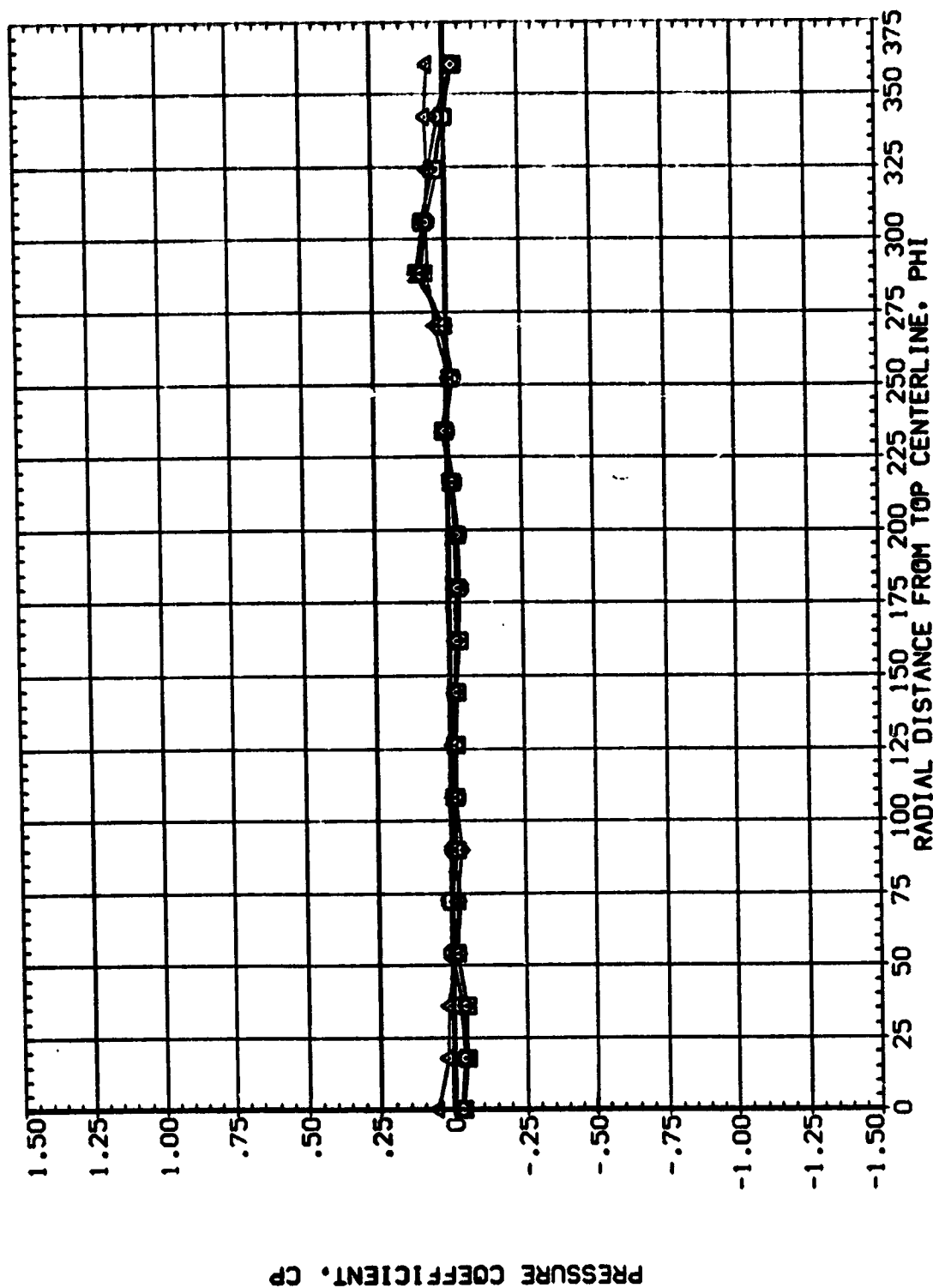
PARAMETRIC VALUES  
CONF IG .000  
RUDDER .140  
ORGINC .000  
50.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
◇	.708	8.000	3.500	SREF 6.198	.000 CONFIG 90.000
□	.776			LREF 5.313	.000 RUDDER .000
△	.844			BREF 5.313	.000 ORBINC .500
▽	.912			XPRP 2.549	
				ZPRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T02)

SYMBOL X/LT BETA MACH

0 .984

6.000

3.500

REFERENCE DATA  
SREF 6.199  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP .000  
ZPRP .000

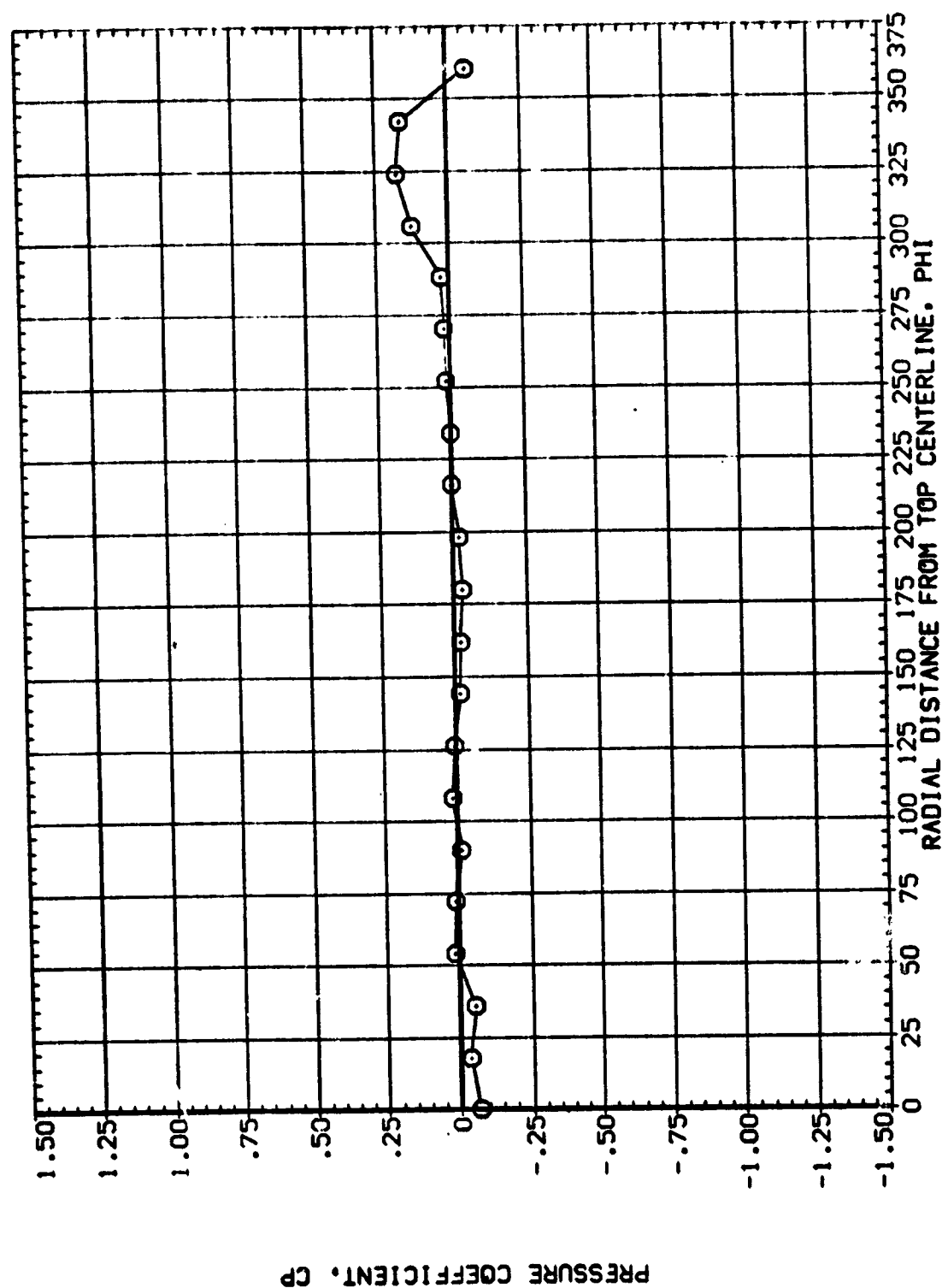
SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTAZ  
X-SRB

.000  
.140  
.000

CONF IG  
RLODR  
ORB INC

90.000  
.000  
.500

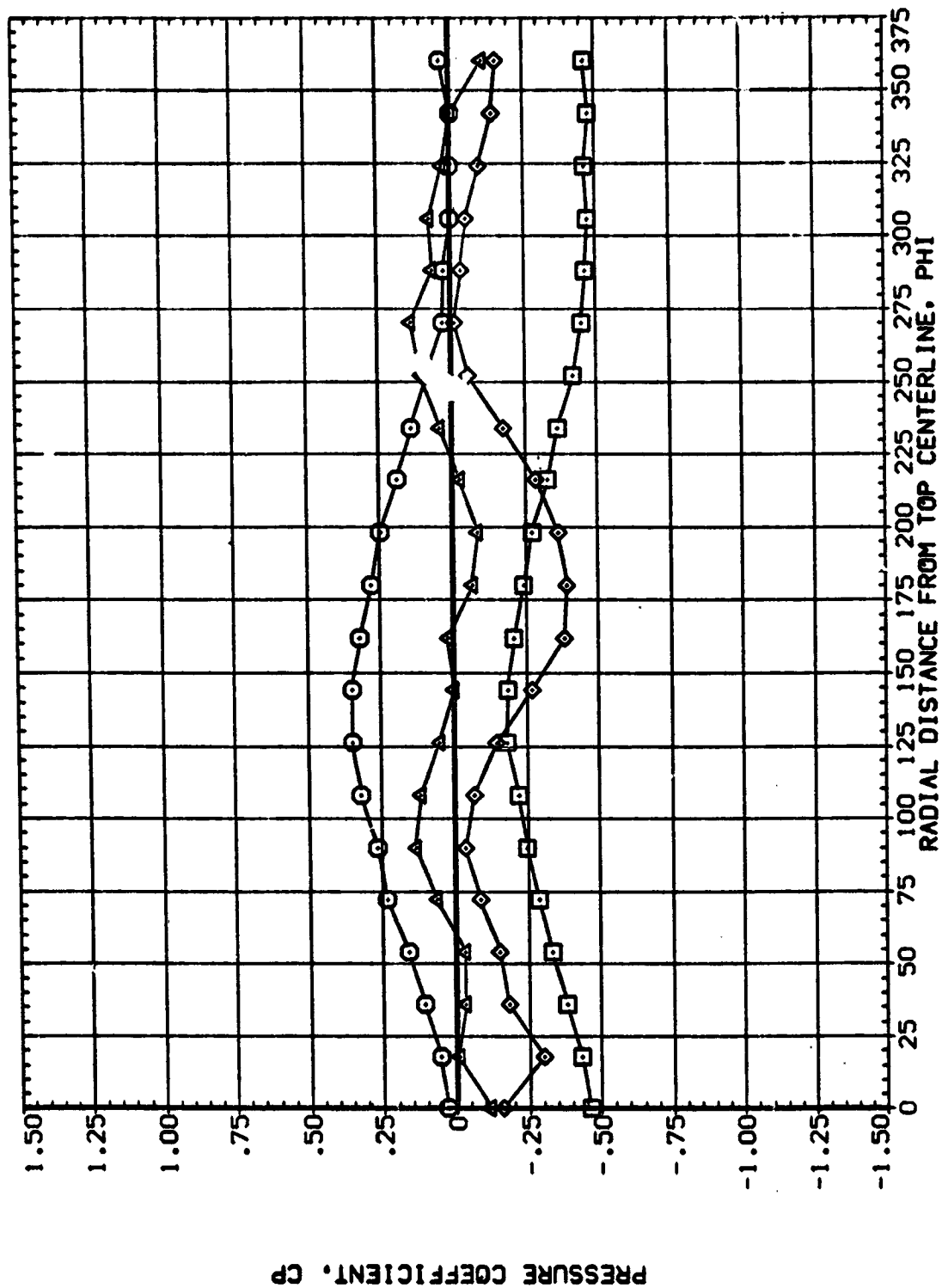


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



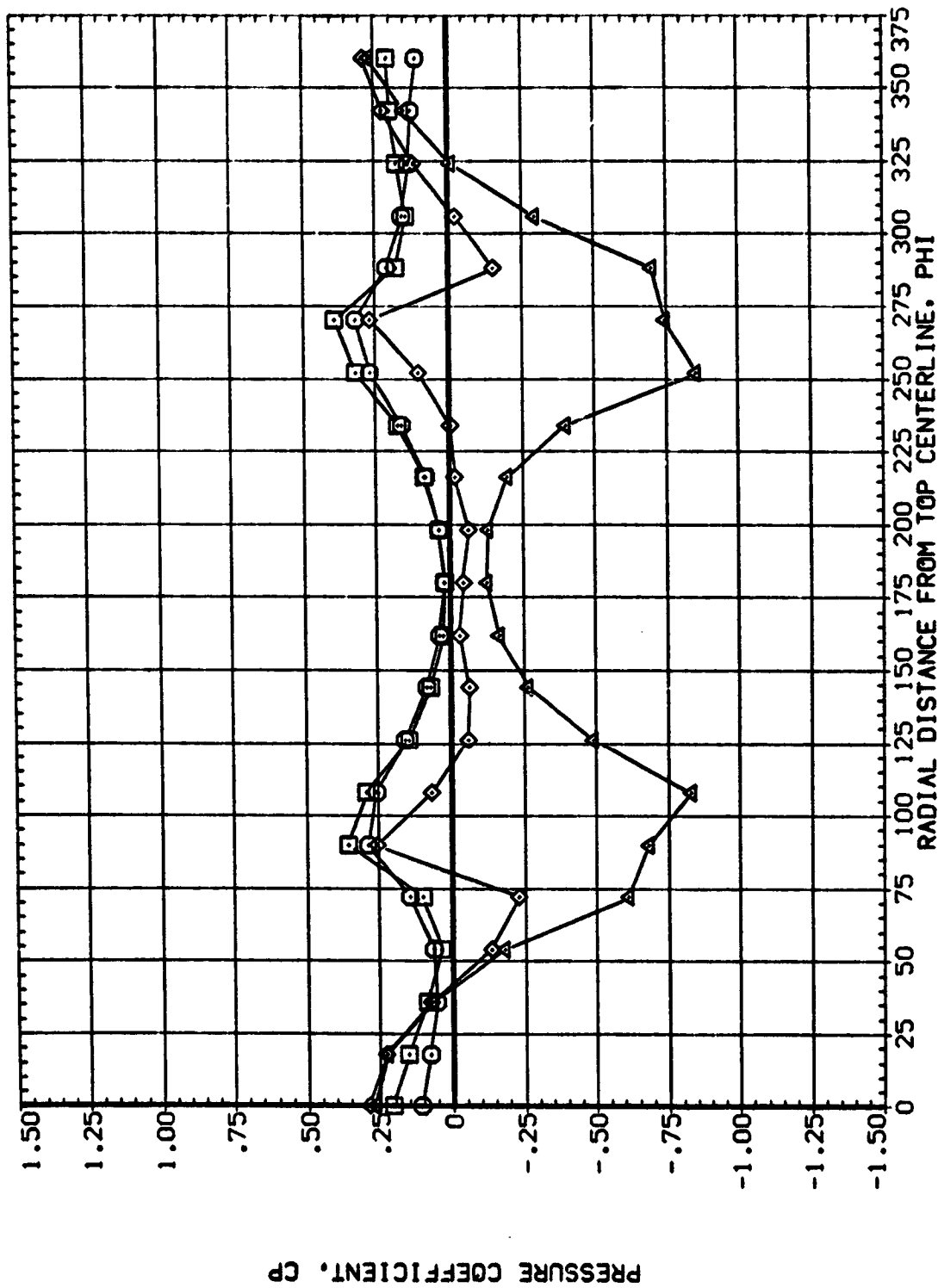
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	X/ALT	BETA	MACH	ALPHA	CONF IG	
○	.076	-4.000	.900	DELTA Z	5.000	90.000
◇	.155			X-SFB	.140	.000
□	.220				.000	.500
△	.235					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

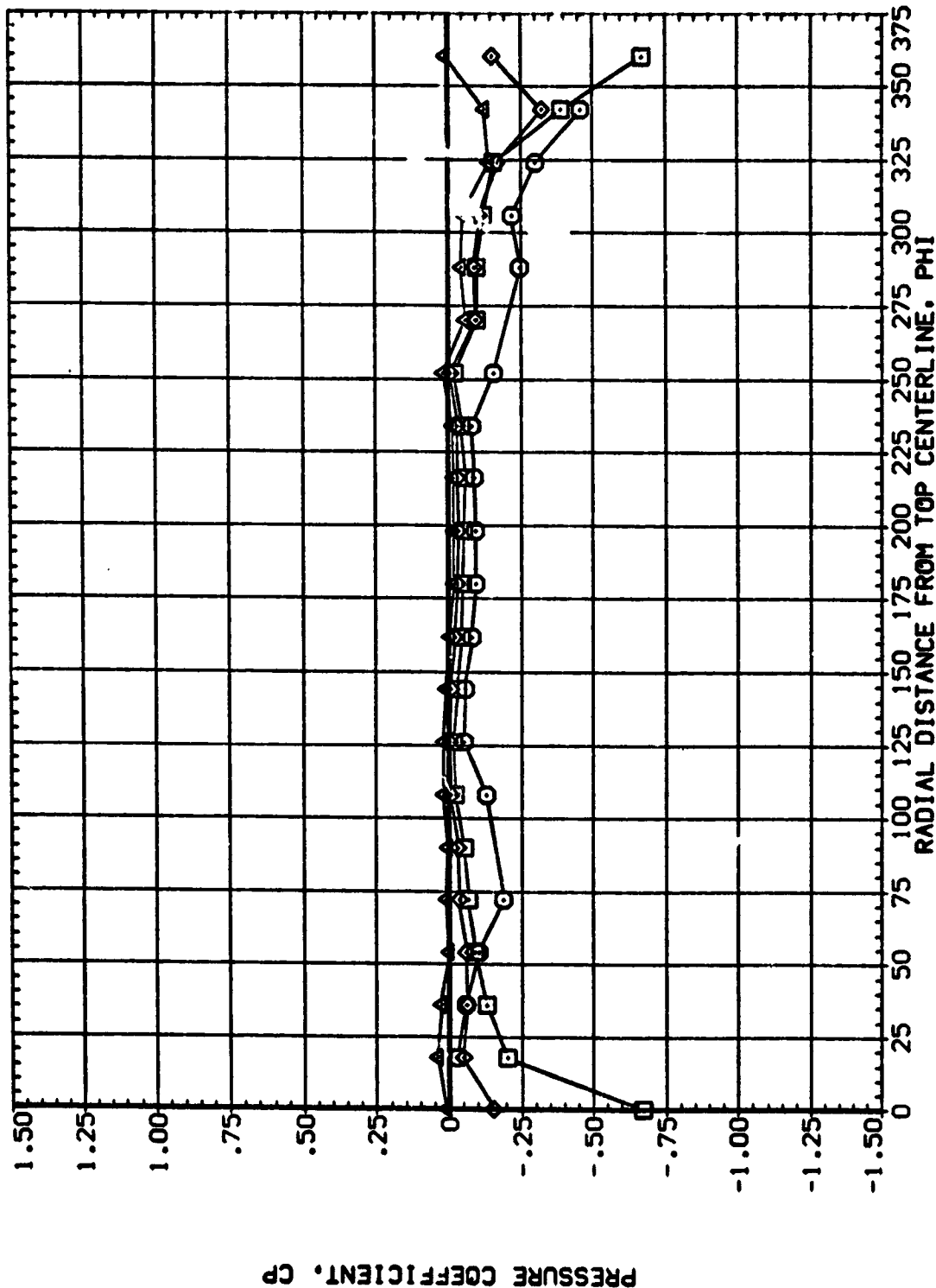
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SO. IN.	IN.	IN.
○	.271	-4.000	.900	6.198	5.313	5.313	2.549	.000	5.000	.140	CONF 16
□	.314										RUDER
◇	.350										ORBIT
△	.382										CONF 16



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.438	-4.000	.900	SREF 6.198	5.000 CONFIG 90.000
□	.506			LREF 5.313	.140 RUDDER .000
◇	.573			BREF 5.313	.000 ORBINC .500
△	.641			XMRP 2.549	
				YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL

X/LT

BETA

MACH

REFERENCE DATA

SO. IN.

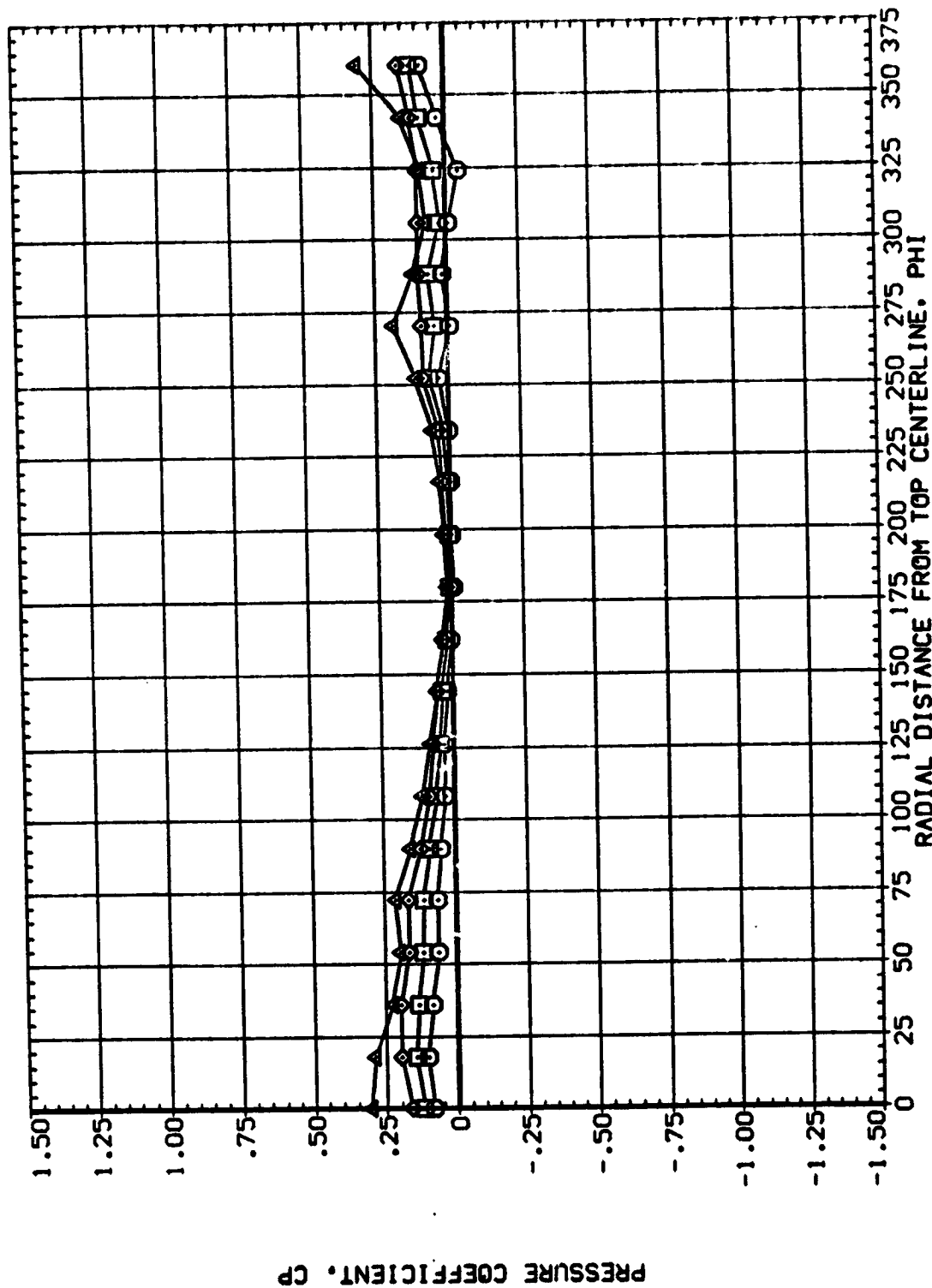
ALPHA

PARAMETRIC VALUES

CONF IG

RUDDER

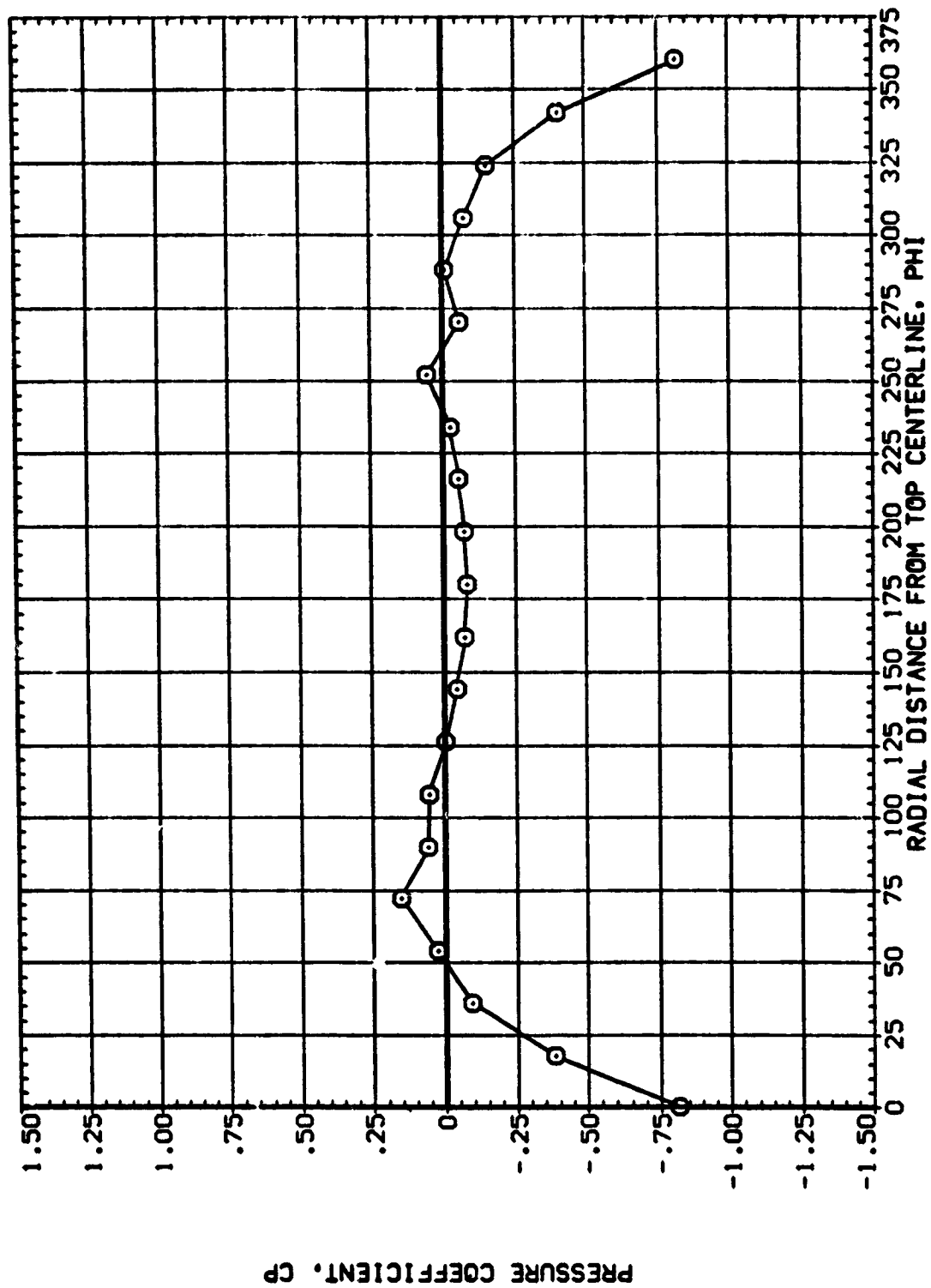
ORBIT INC



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

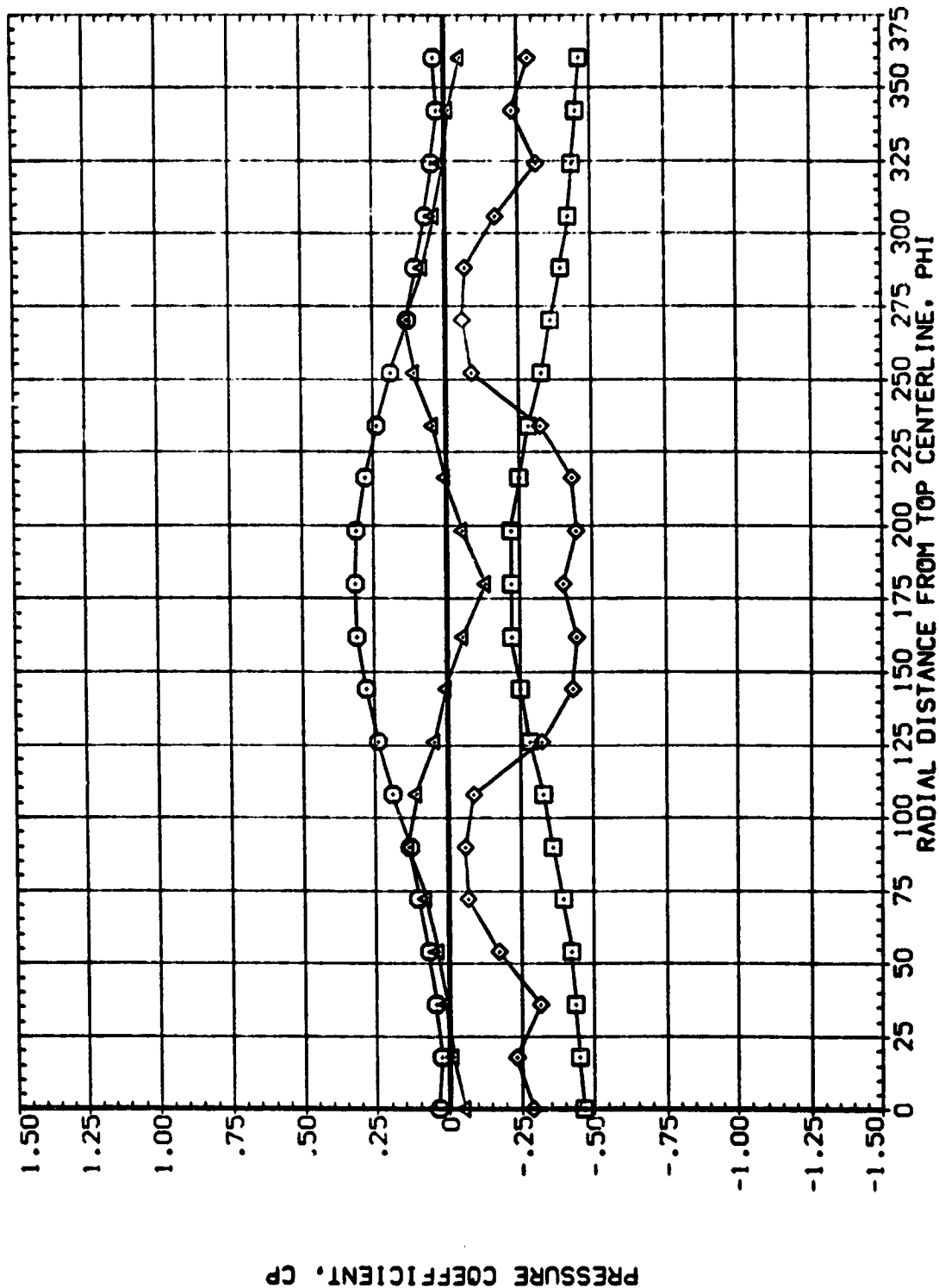
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
0	.984	-4.000	.500	SREF 6.198 LREF 5.313 BREF 5.313 XREF 2.548 YREF .000 ZREF .000	5.000 .140 .000 CONF IG RUDDER ORB INC
				50. IN. IN. IN. IN. IN.	90.000 .000 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

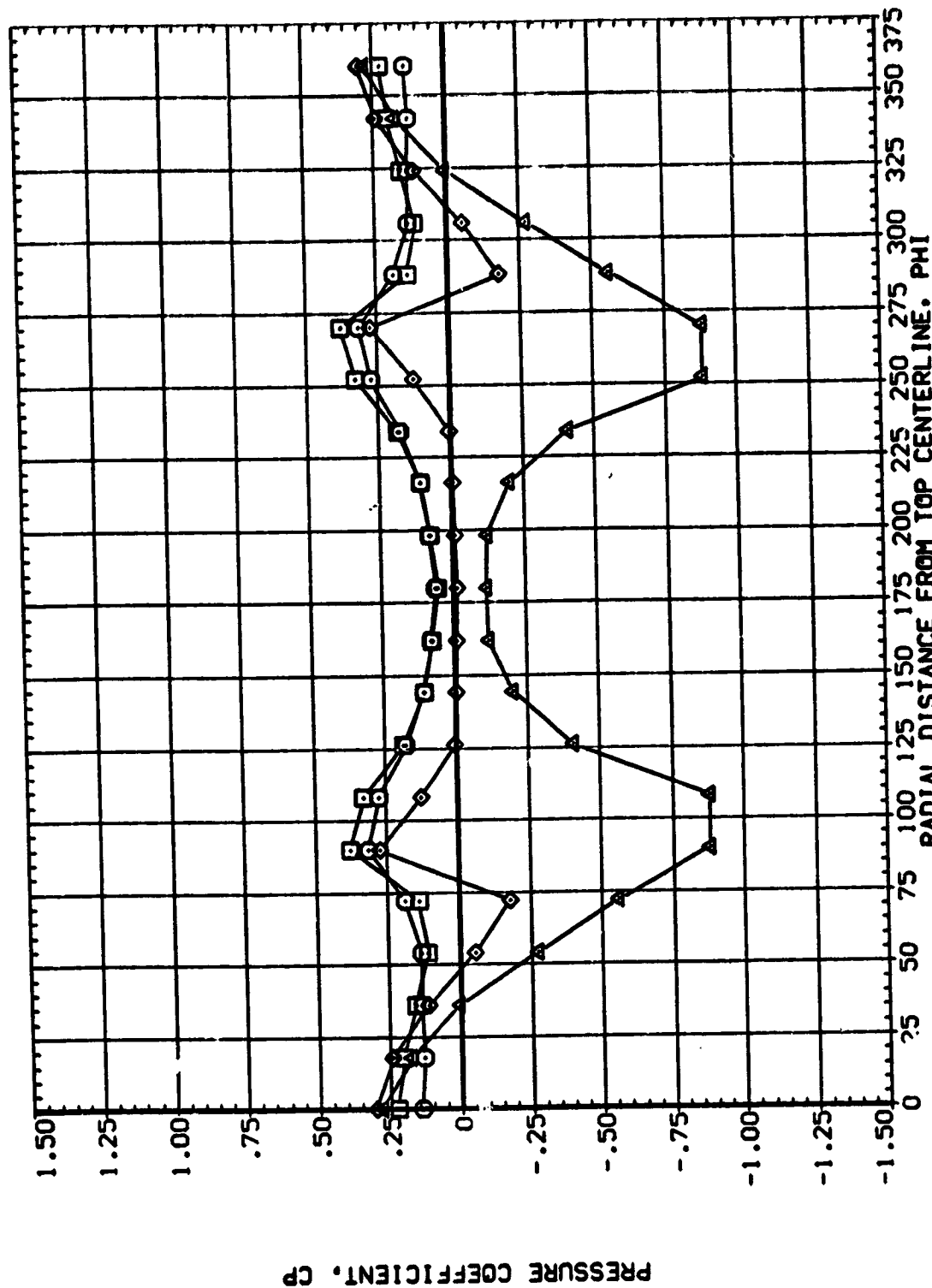
SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	X/LT	BETA	MACH	ALPHA	CONF IG	50.000
○	.076	.000	.900	DELTA Z	RUDER	.000
□	.155			X-SRB	ORBIT	.500
△	.235					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

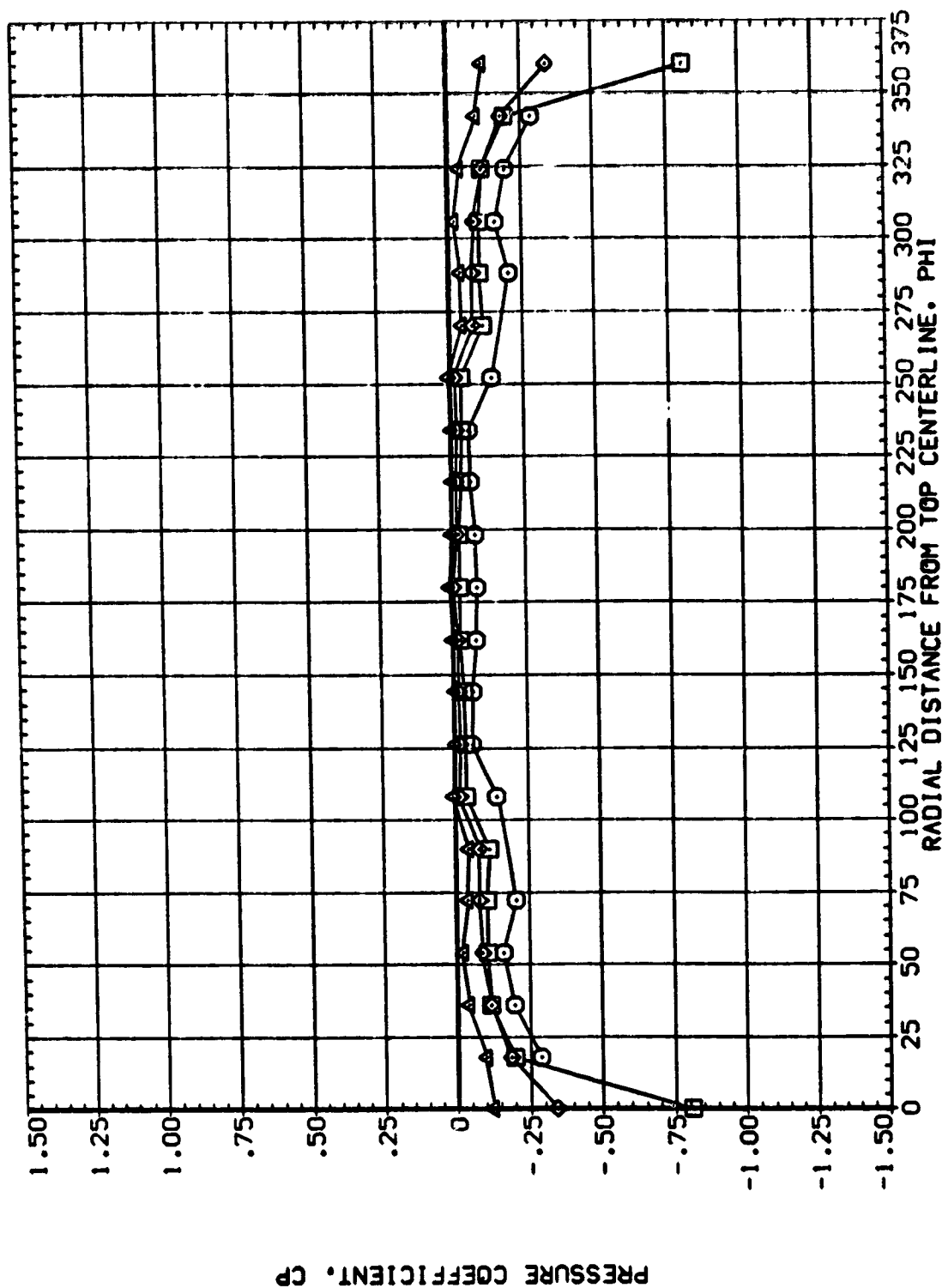
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	50. IN.	ALPHA	CONFIG	
○	.271	.000	.500	6.198	IN.	DELTA Z	.140	.000
□	.314			5.313	IN.	X-S98	.000	.500
◇	.350			2.549	IN.			
△	.382			.000	IN.			
				ZHPP				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
□	.438	.000	.900	SREF 6.198	5.000 CONF IG 90.000
◇	.506			LREF 5.313	.140 RUDDER .000
◇	.573			BREF 5.313	.000 ORB INC .500
△	.641			XREF 2.549	
				YREF .000	
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

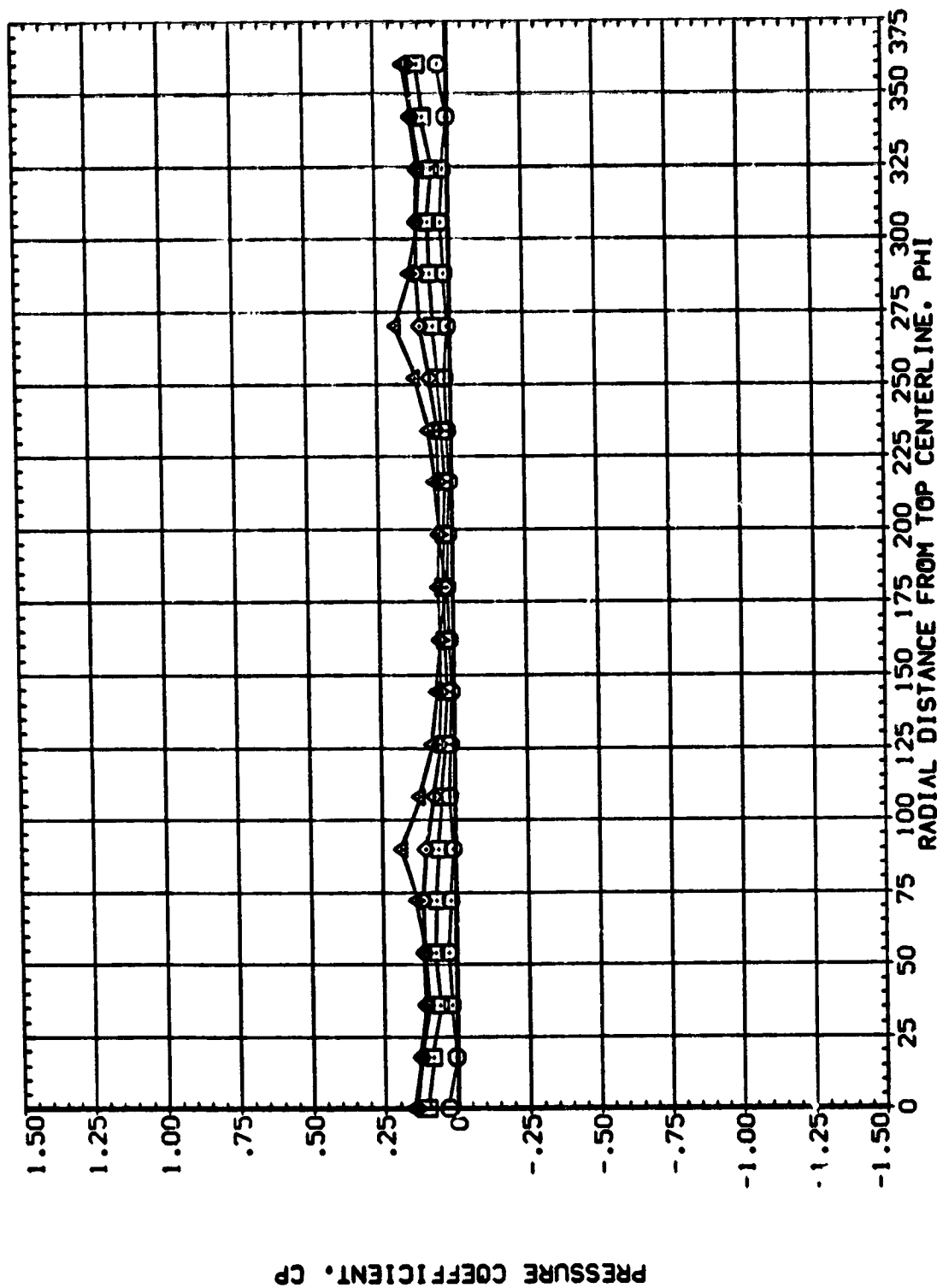


**SYMBOL**       

X/LT	BETA	MACH
.708	.000	.900
.776		
.844		
.912		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000

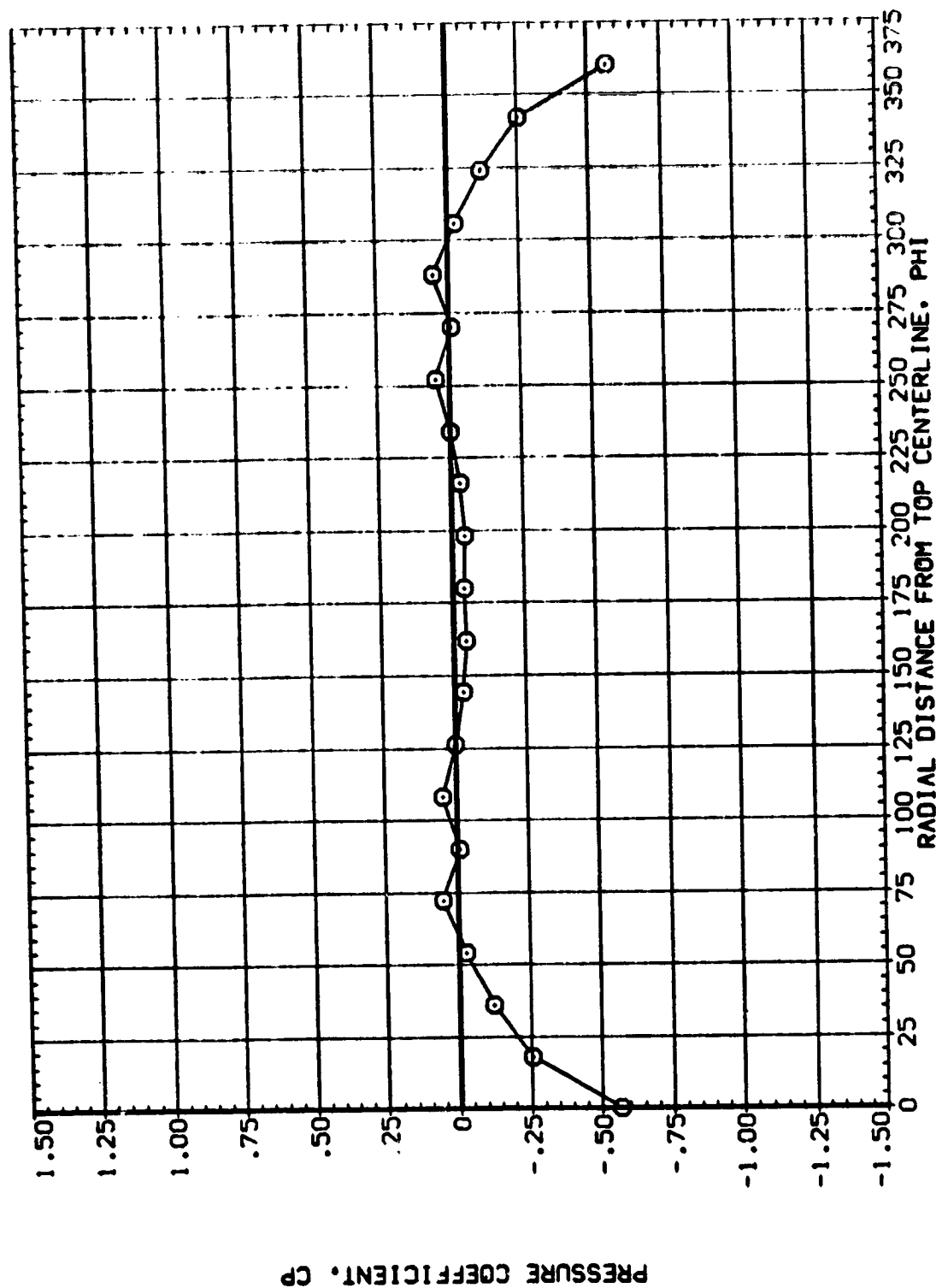
ALPHA	PARAM	VALUES
DELTA Z	5.000	CONF IG
X-508	.140	RUDER
	.000	ORIGIN
		90.000
		.000
		.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

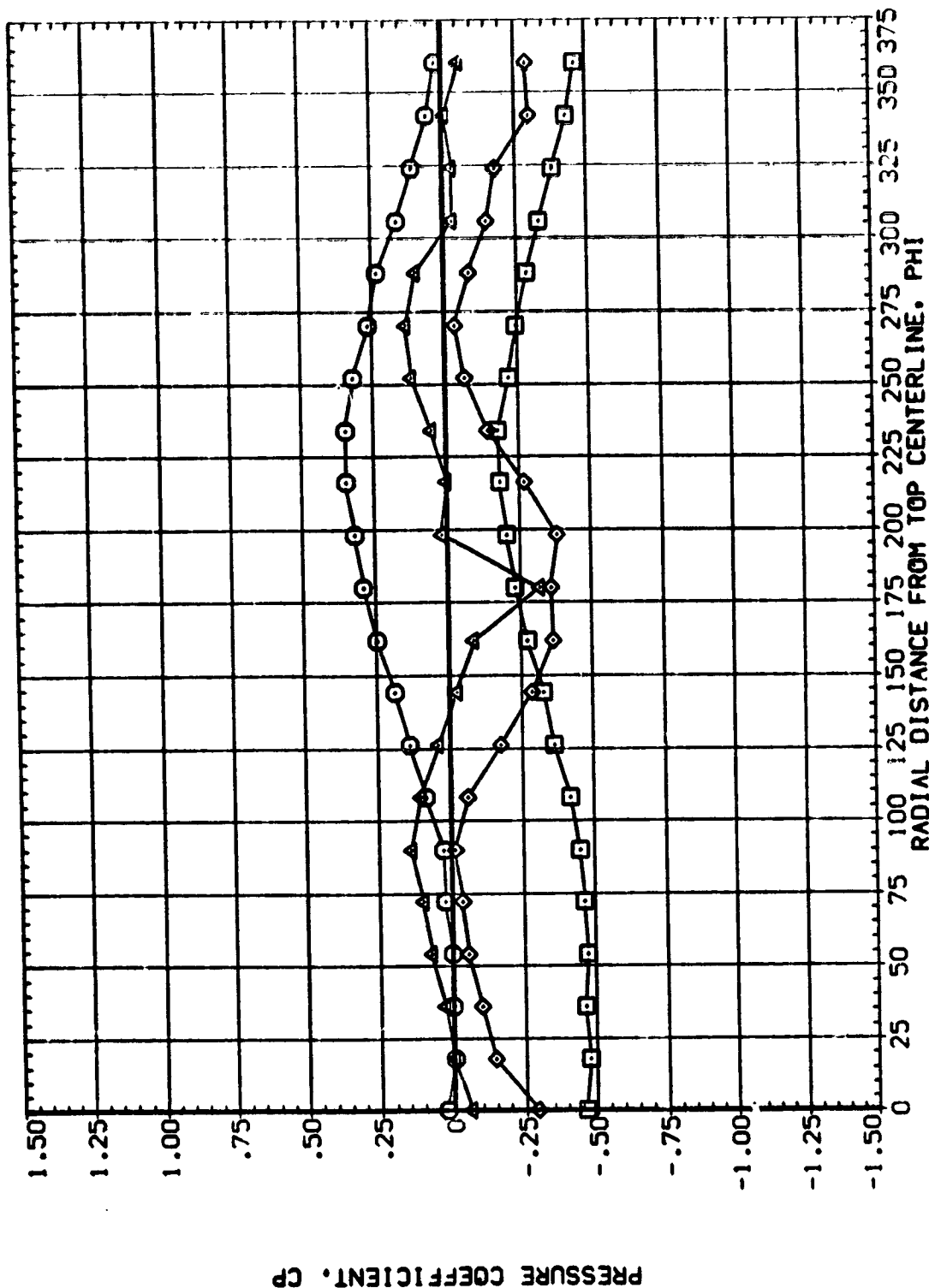
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	50. IN.	ALPHA	CONFIG	50.000
0	.984	.000	.900	5.313	5.313	5.313	2.548	IN.	DELTA Z	R/CORR	.000
				.000	.000	.000	.000	IN.	X-SRB	SRB INC	.500
								IN.			
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

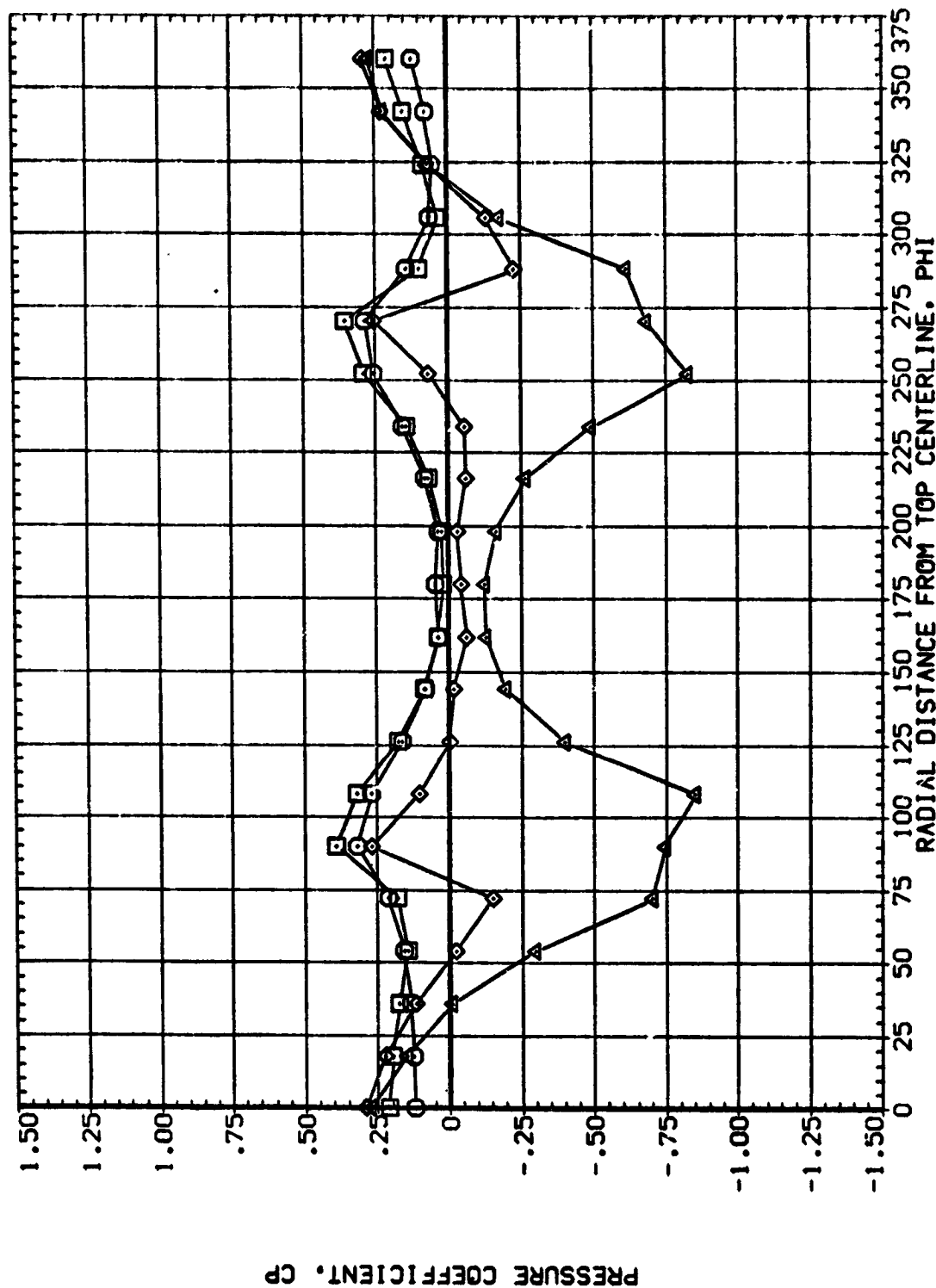
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	50. IN.	ALPHA	CONFIS	90.000
○	.076	4.000	.900	LREF	5.313	IN.	DELTAZ	.142	.000
□	.155			BREF	5.313	IN.	X-SRB	.000	.500
◇	.220			XMRP	2.549	IN.			
△	.235			ZMRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

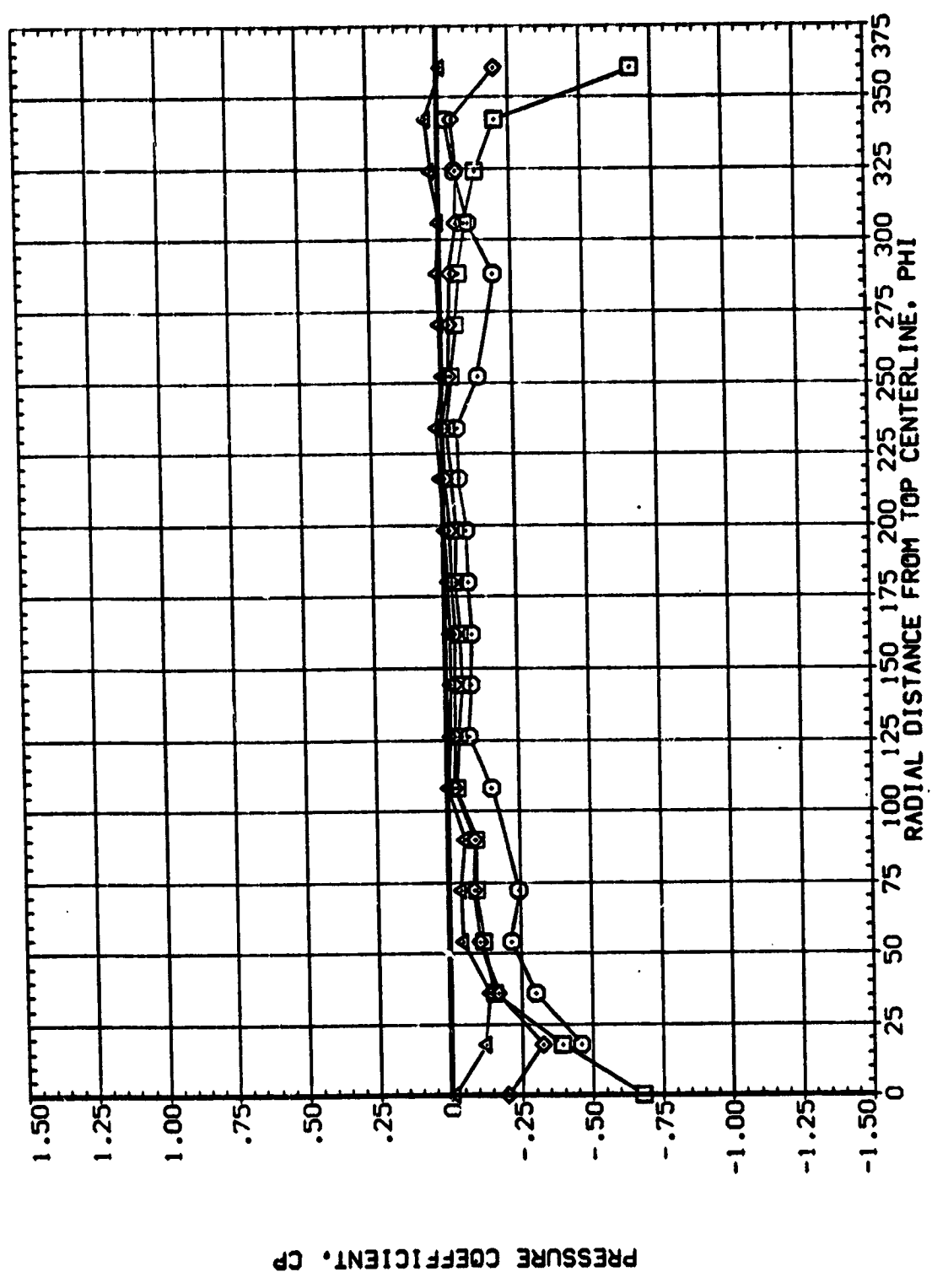
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				SREF	LREF	XREF	ZREF	ALPHA	DELTAZ	CONF IG	ORBIT NC
○	.271	4.000	.900	6.198	3.313	5.313	2.549	5.000	.140	.000	.500
□	.314										
◇	.350										
△	.382										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CONF IG	50.000
○	.438	4.000	.900	6.198	5.313	5.313	2.549	.140	.000	RUDDER	.000
□	.506							X-SRB		ORBITAL	.500
◇	.573										
△	.641										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .708  
 .776  
 .844  
 .912

BETA 4.000

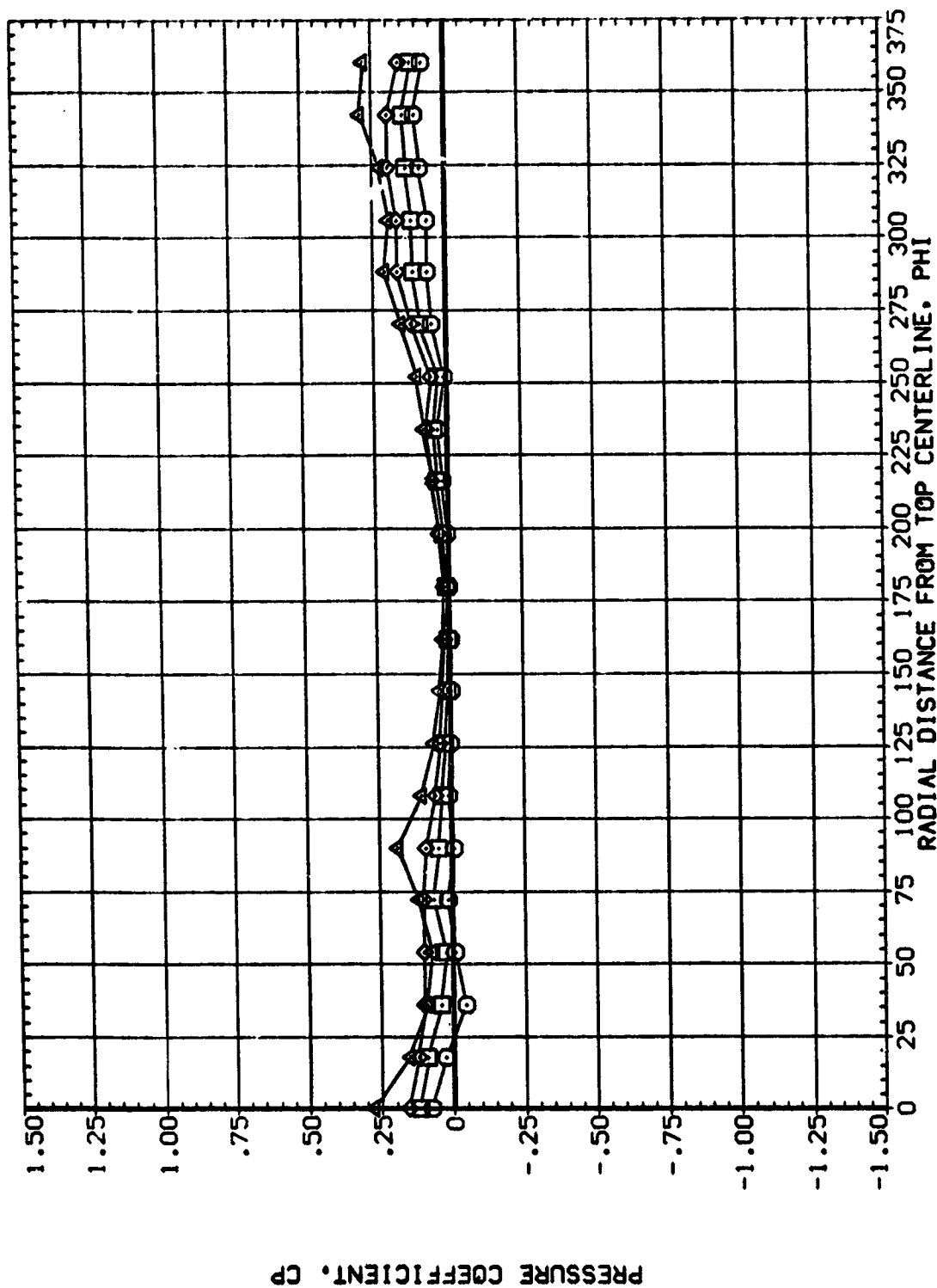
MACH .900

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 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

PARAMETRIC VALUES  
 5.000  
 .140  
 .000

CONF IG  
 RUDDER  
 ORBINC

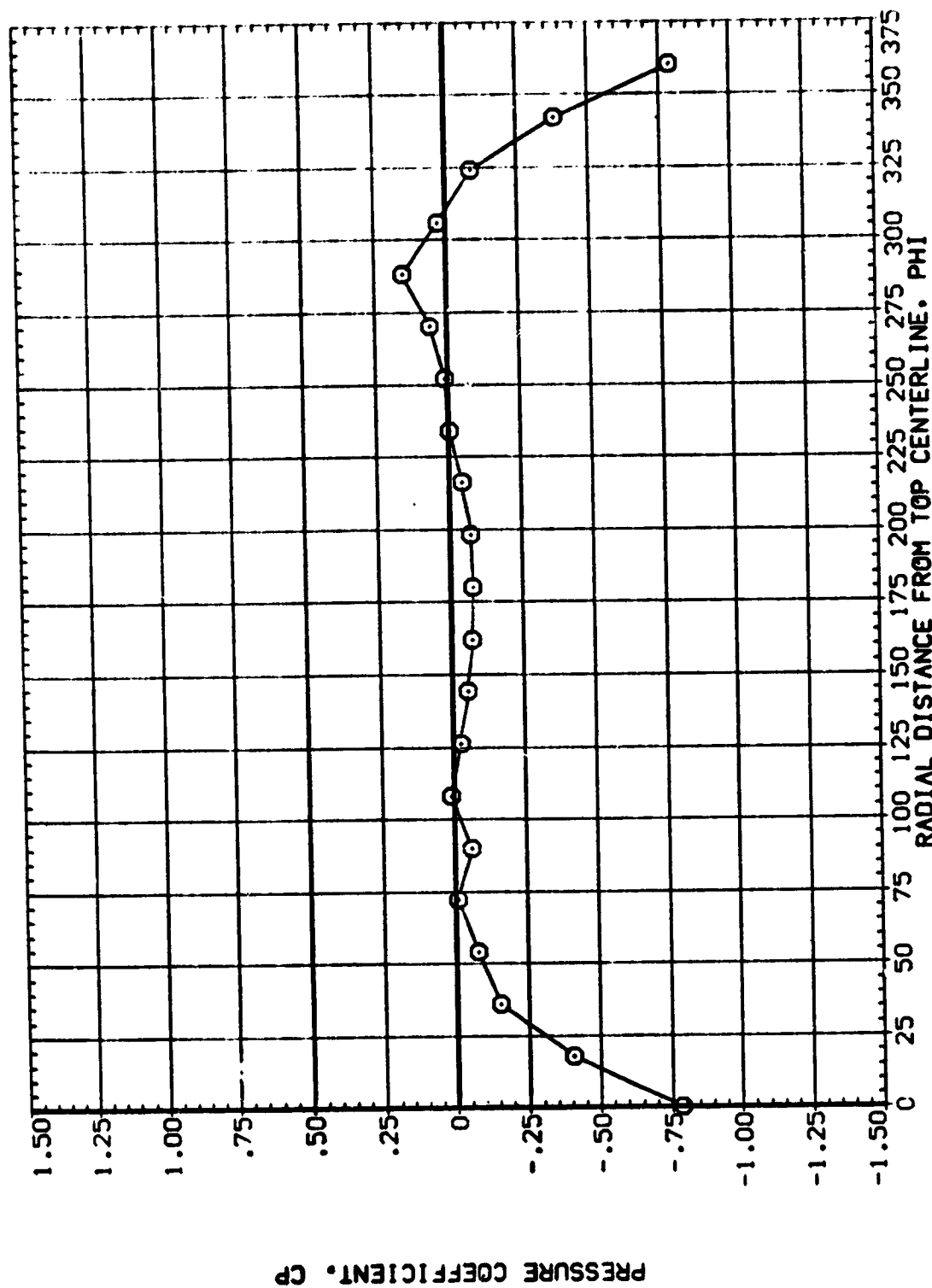
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RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

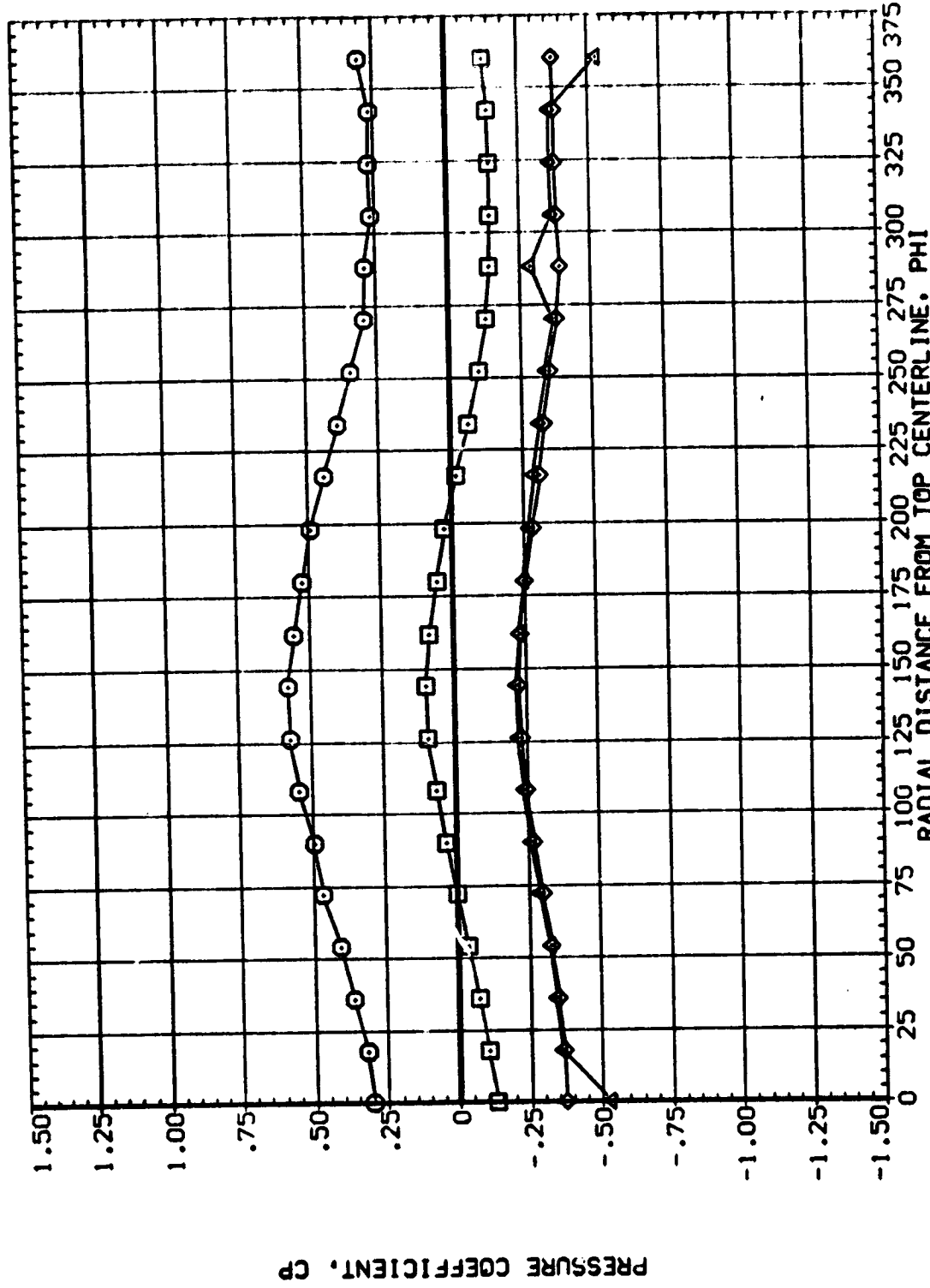
MSFC 567(1A32F) T9 S3/2 S3/2 03

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	SO. IN.	ALPHA	PARAMETRIC VALUES
0	.984	4.000	.900	SREF 6.198	IN.	DELTA Z	5.000 CONF IG
				LREF 5.313	IN.	X-SRB	.140 R/OVER
				BREF 5.313	IN.		.000 DRBINC
				XMRP 2.549	IN.		
				YMRP .000	IN.		
				ZMRP .000	IN.		
							90.000
							.000
							.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	5.000	CONFIS	50.000	
○	.076	-4.000	1.250	6.198	5.313	5.313	2.549	.140	RODDER	.000	
□	.155							.000	ORBINC	.500	
◇	.220										
△	.235										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



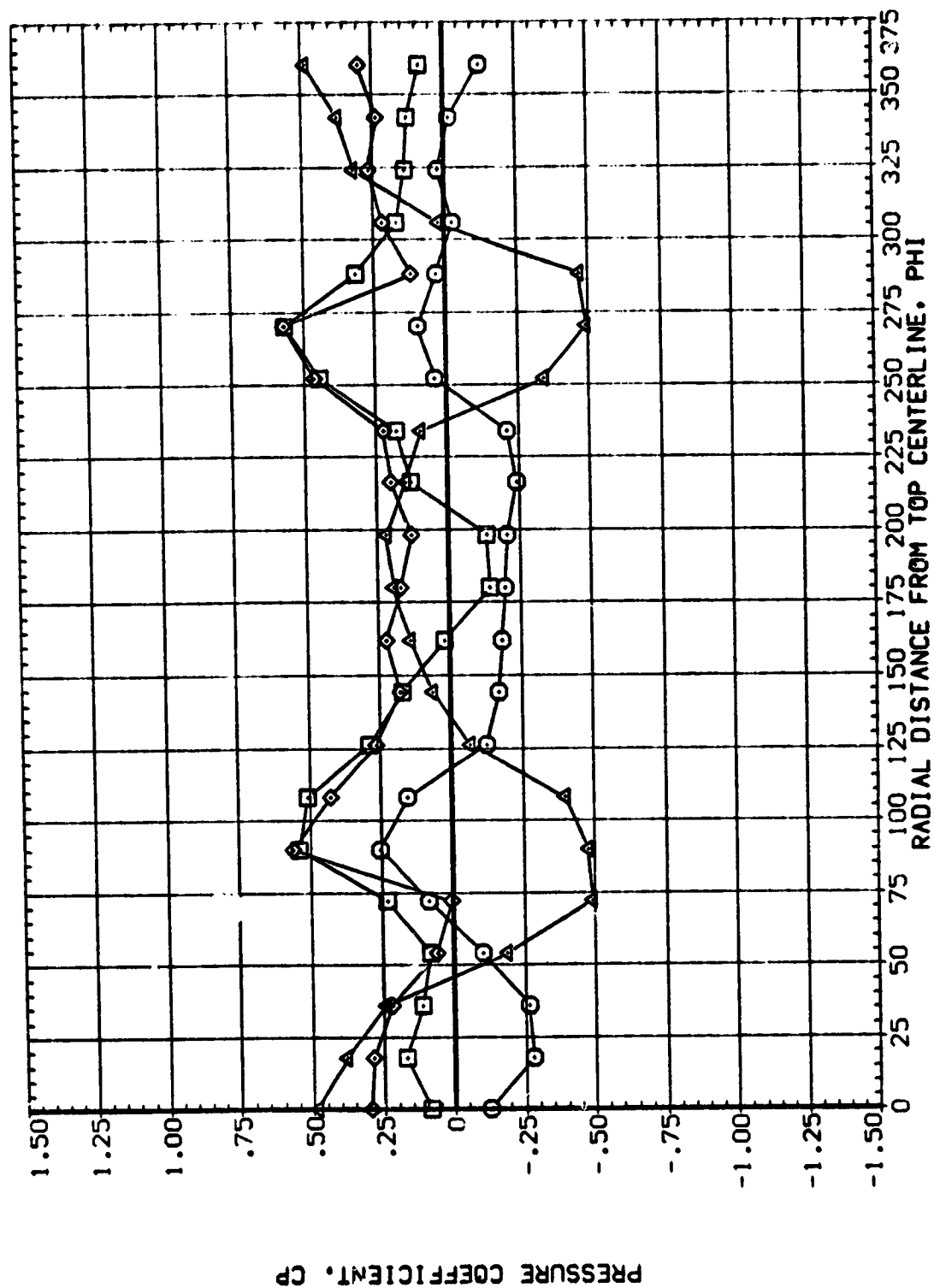
**Symbo**

LI	BETA	MACH
.271	-4.000	1.250
.314		
.350		
.382		

REFERENCE DATA	
SREF	6.198
LREF	5.313
BREF	5.313
XMRP	2.549
YMRP	.000
ZMRP	.000
	50. IN.
	IN.
	IN.
	IN.
	IN.
	IN.

ALPHA	5.000	CONF IG
DELTA Z	.140	R U D D E R
X-SRB	.000	O R B I T

PARAMETRIC VALUES	
5.000	CONFIG
.140	RUDDER
.000	ORBITAL
90.000	
.000	
.500	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
○  
□  
◇  
△

X/LT .438  
.506  
.573  
.641

BETA -4.000

MACH 1.250

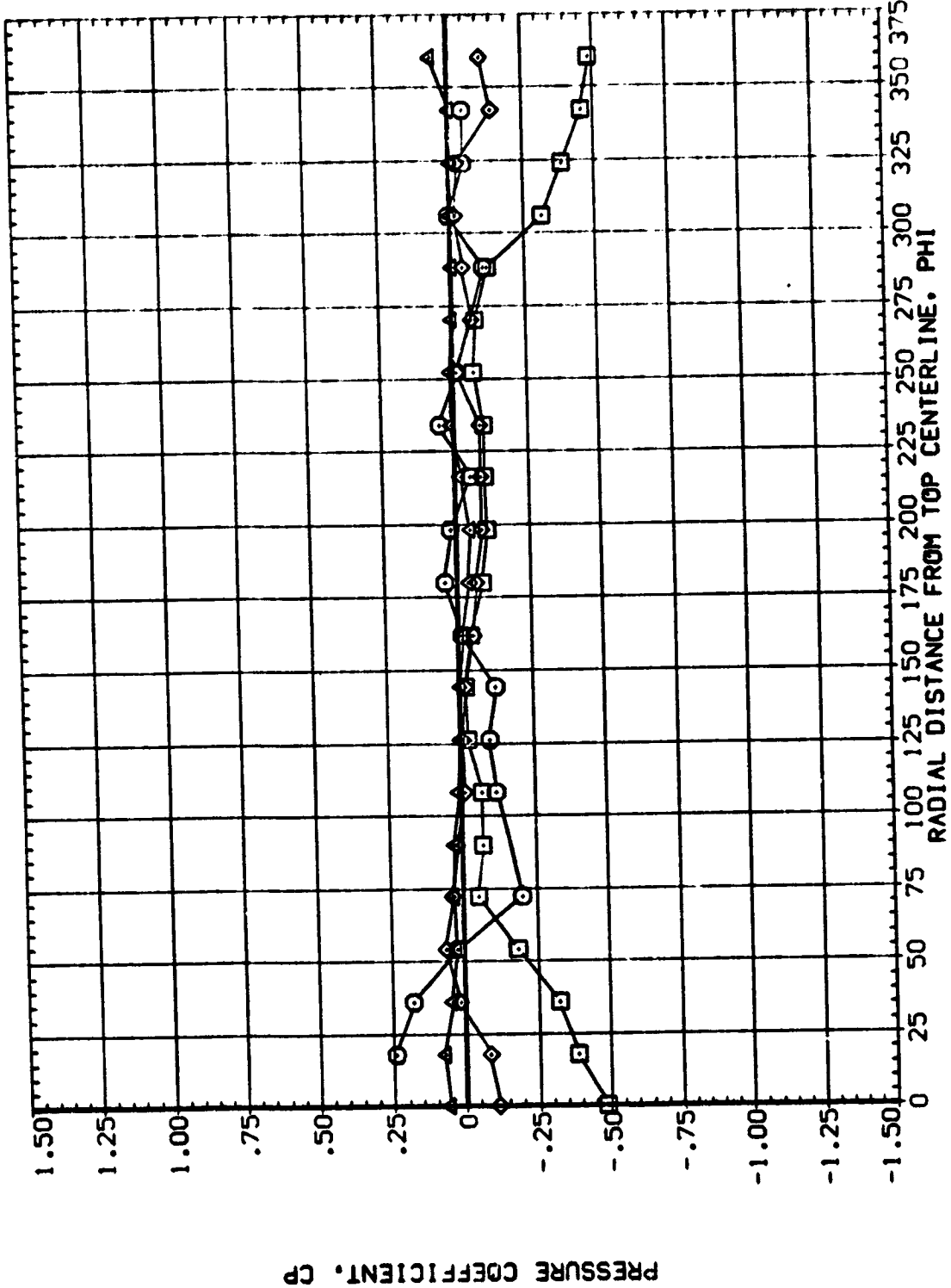
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BREF 5.313  
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YPRP .000  
ZPRP .000

SD. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
5.000 CONF 15  
.140 RUDDER  
.000 ORB INC

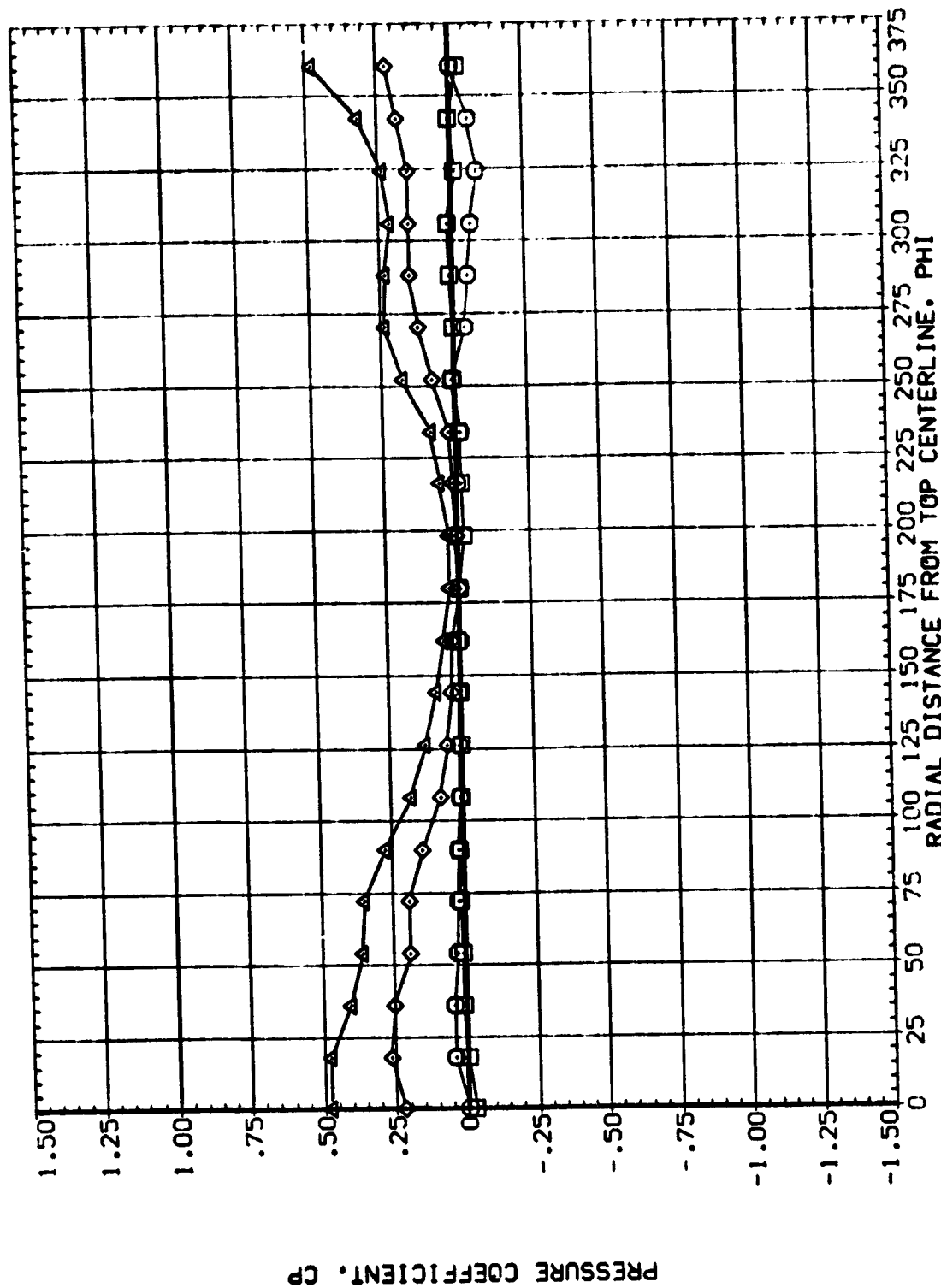
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RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03      EXTERNAL TANK (A82T03)

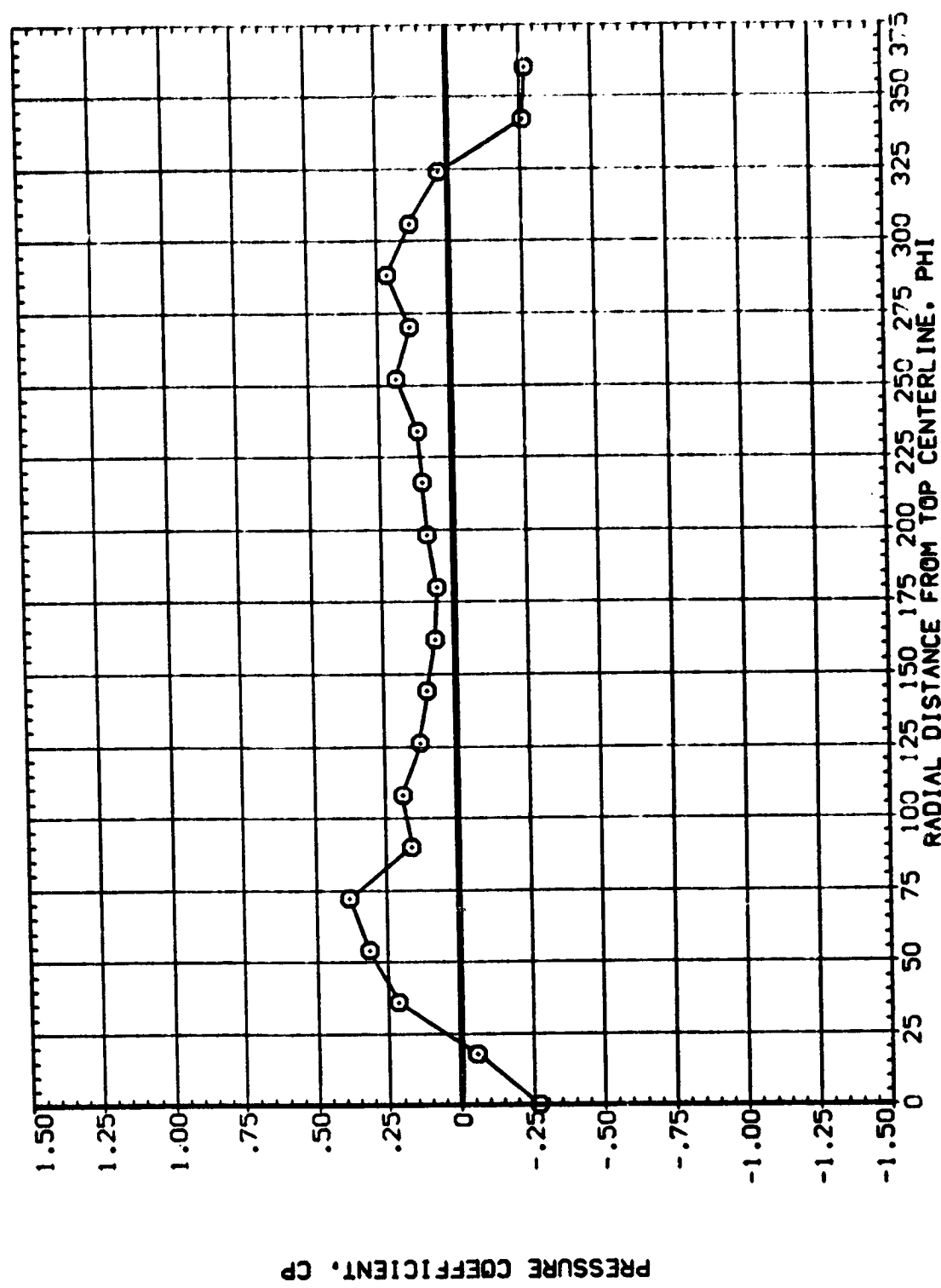
MSFC 367 (INJ2) 15 007 E											
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
○	.708	-4.000	1.250	SREF	6.198	50. IN.	ALPHA	5.000	CONF IG	92.000	
□	.776			LREF	5.313	IN.	DELTA Z	.140	RUDER	.000	
◇	.844			BREF	5.313	IN.	X-SRB	.000	ORBITAL	.000	
△	.912			XMRP	2.549	IN.					
				YMRP	.000	IN.					
				ZMRP	.000	IN.					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

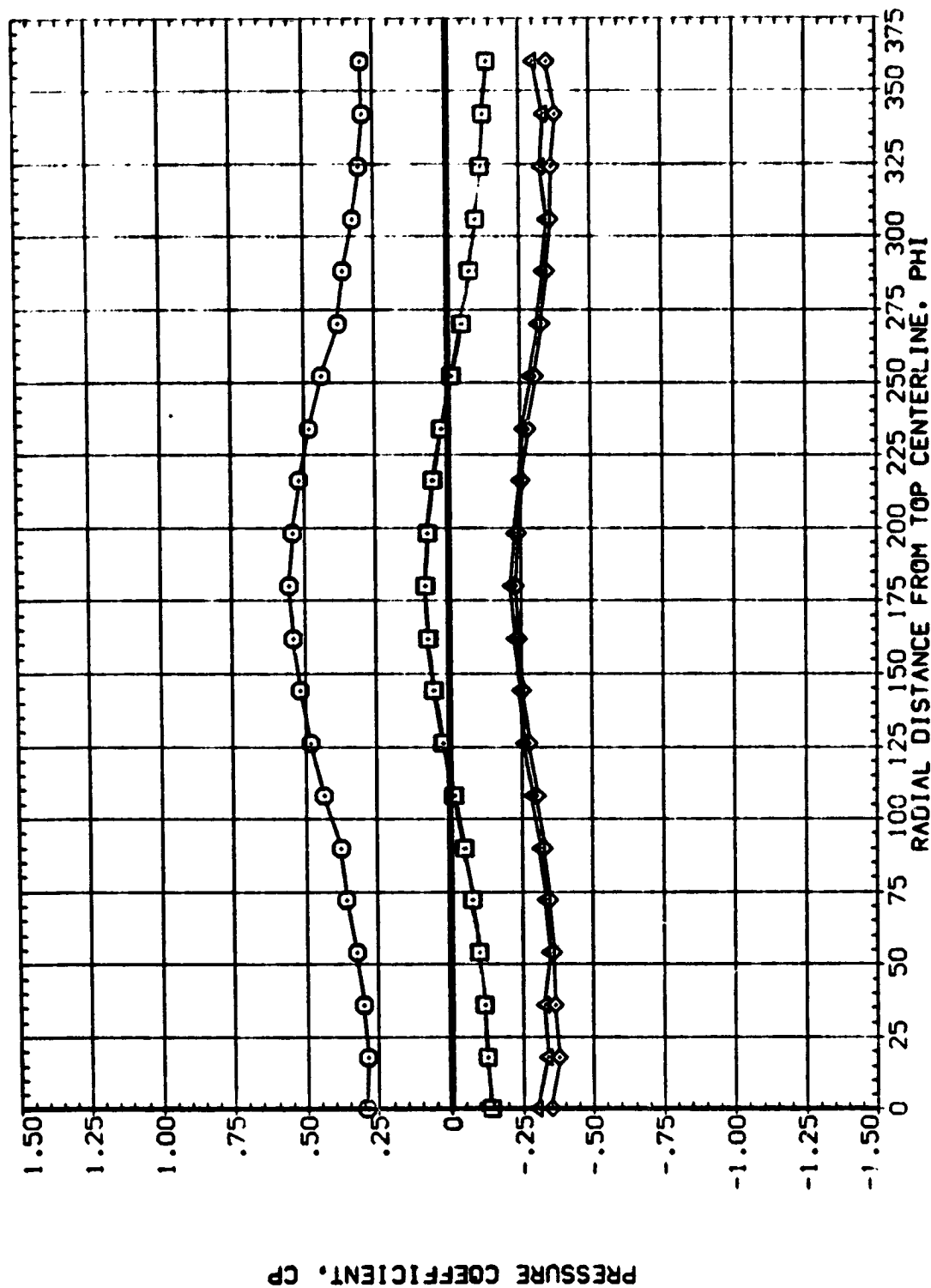
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				LREF 5.313	IN. 5.313	.140	RUDDER .000
				BREF 2.549	IN. 2.549	.000	ORBITAL .500
				YMRP .000	IN. .000		
				ZMRP .000	IN. .000		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

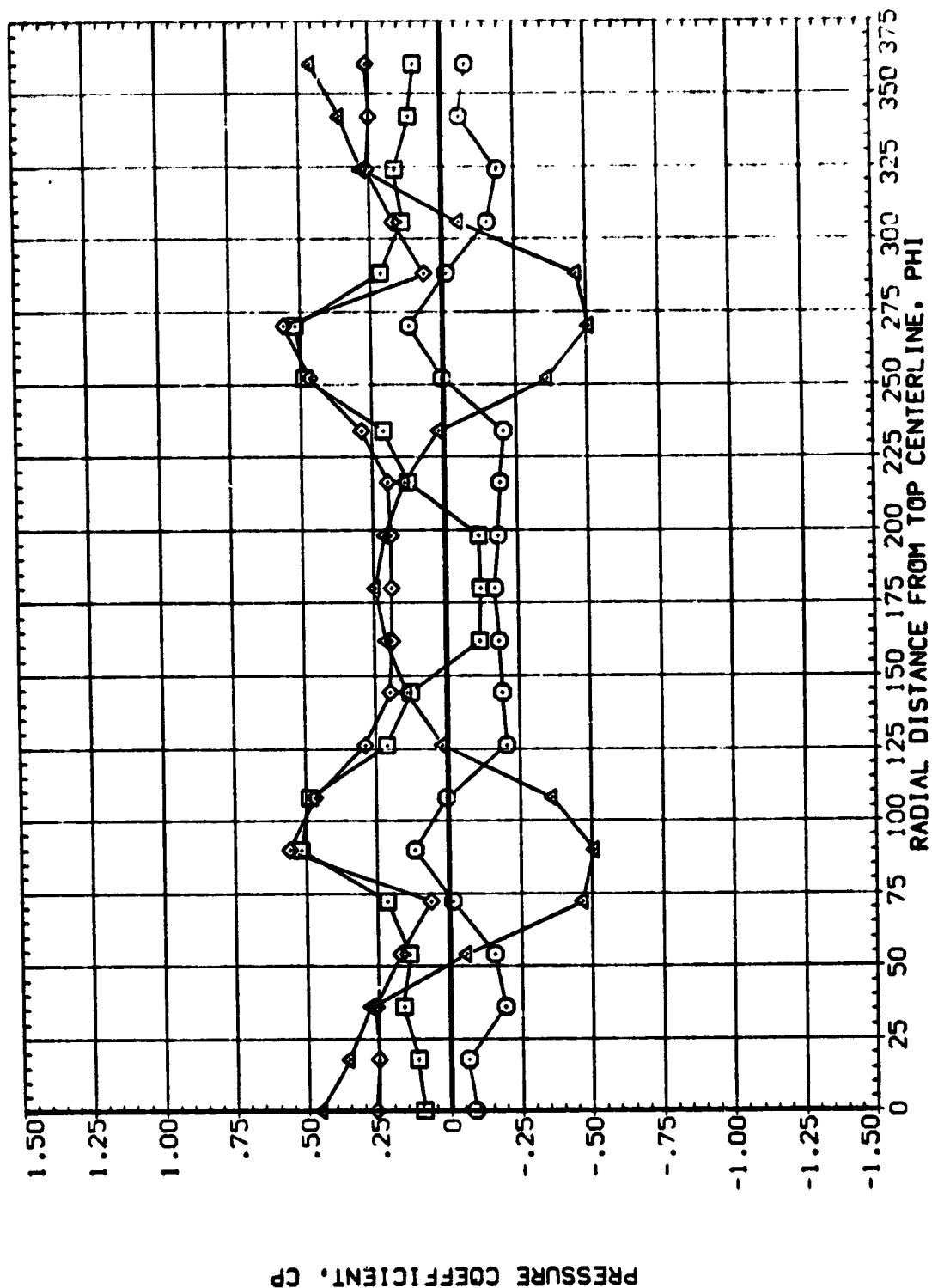
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
○	.076	.000	1.250	SREF	6.198	50. IN.	5.000	CONF IG	50.000
□	.155			LREF	5.313	IN.	.140	RUDDER	.000
◇	.220			BREF	5.313	IN.	.000	DRB INC	.500
△	.235			XMRP	2.549	IN.			
				YMRP	.000	IN.			
				ZMRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

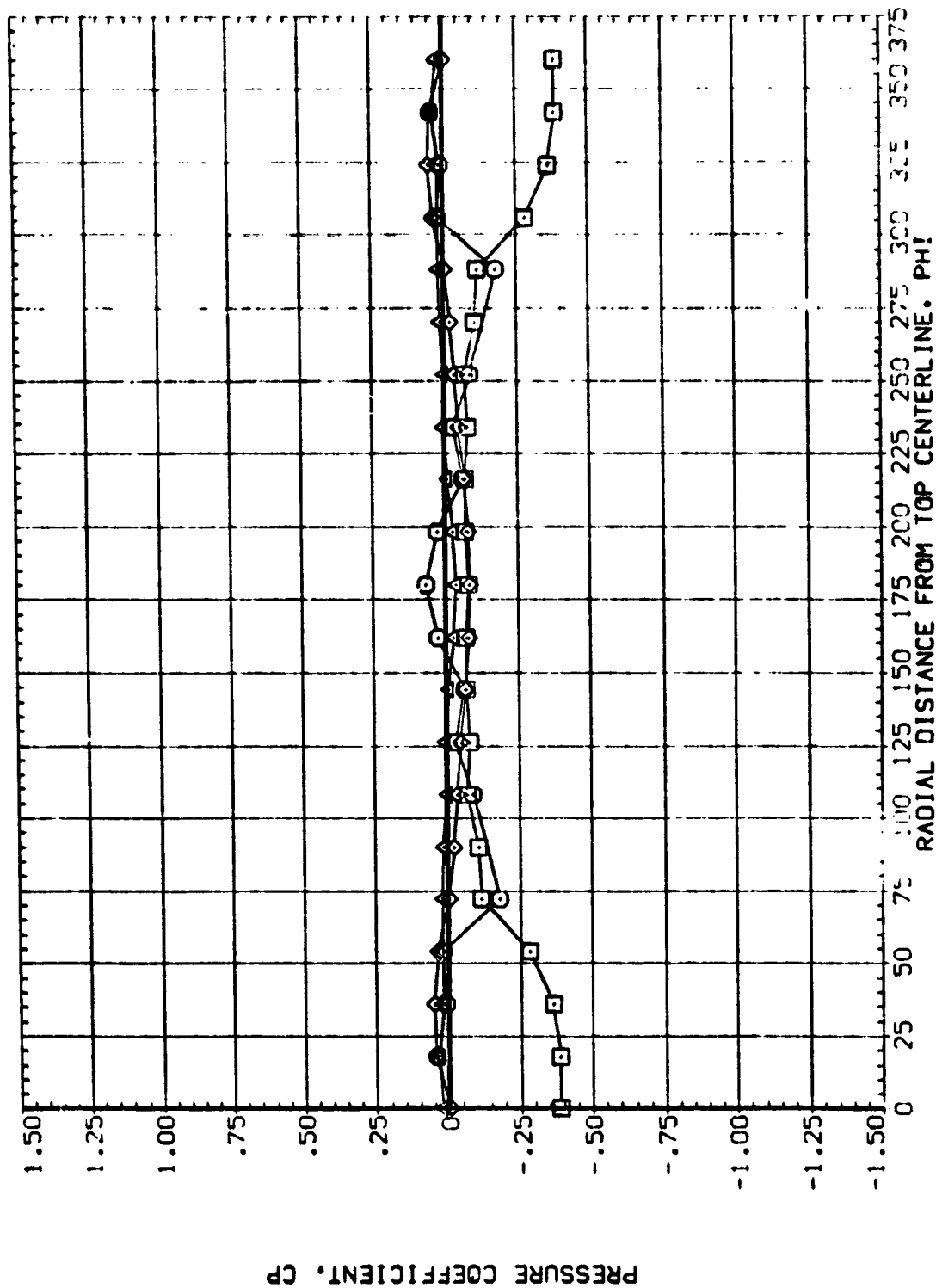
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF IS	9C.000
○	.271	.000	1.250	5.313	5.313	2.549	.000	IN.	DELTA Z	RUDER	.000
◇	.314			5.313	5.313	2.549	.000	IN.	X-SRB	ORB INC	.500
□	.350			5.313	5.313	2.549	.000	IN.			
△	.382			5.313	5.313	2.549	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	SREF	SO. IN.	ALPHA	CONF IG	CONF IG	CONF IG
○	.438	.000	1.250	5.313	5.313	5.313	IN.	DELTA Z	.140	RUEEP	.000
□	.506			2.549	2.549	2.549	IN.	X-SRB	.000	DRS INC	.500
◇	.573			.000	.000	.000	IN.				
△	.641			.000	.000	.000	IN.				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL

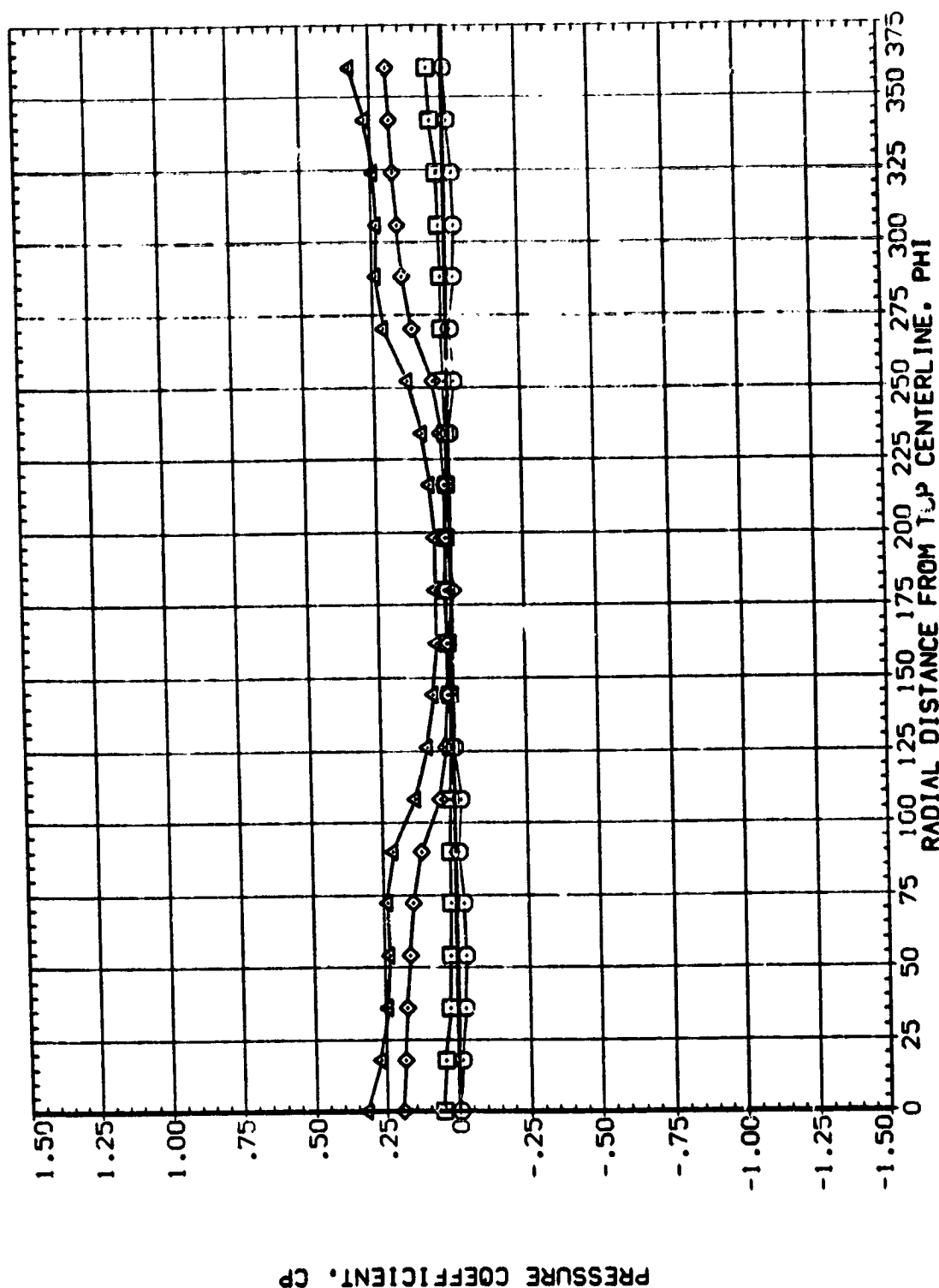
X/LT .708  
.776  
.844  
.912

BETA .000

MACH 1.250

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

PARAMETRIC VALUES  
5.000 CONF 15  
.140 RUDDER  
.000 ORBITAL  
50.000  
.000  
.500

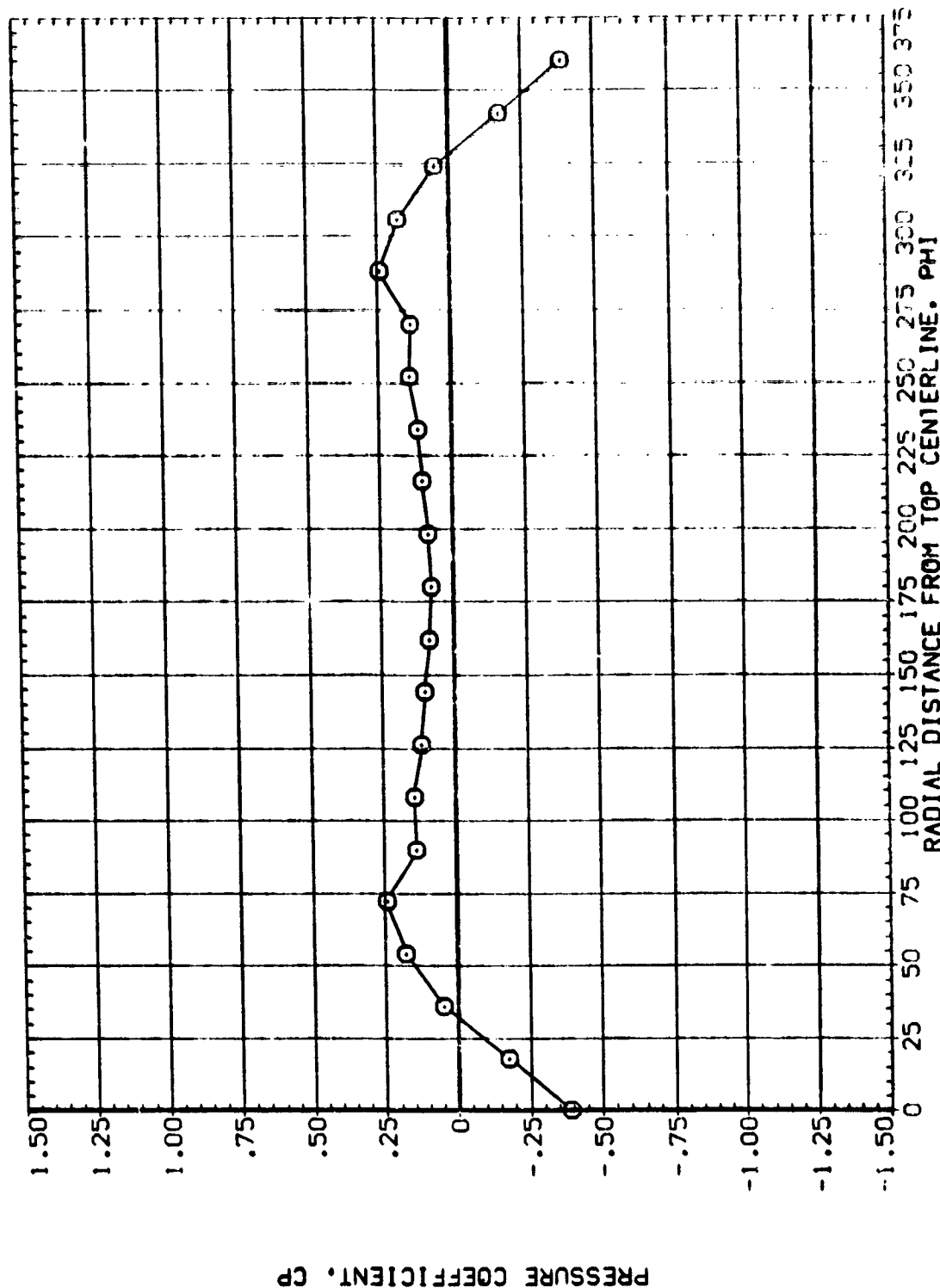


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

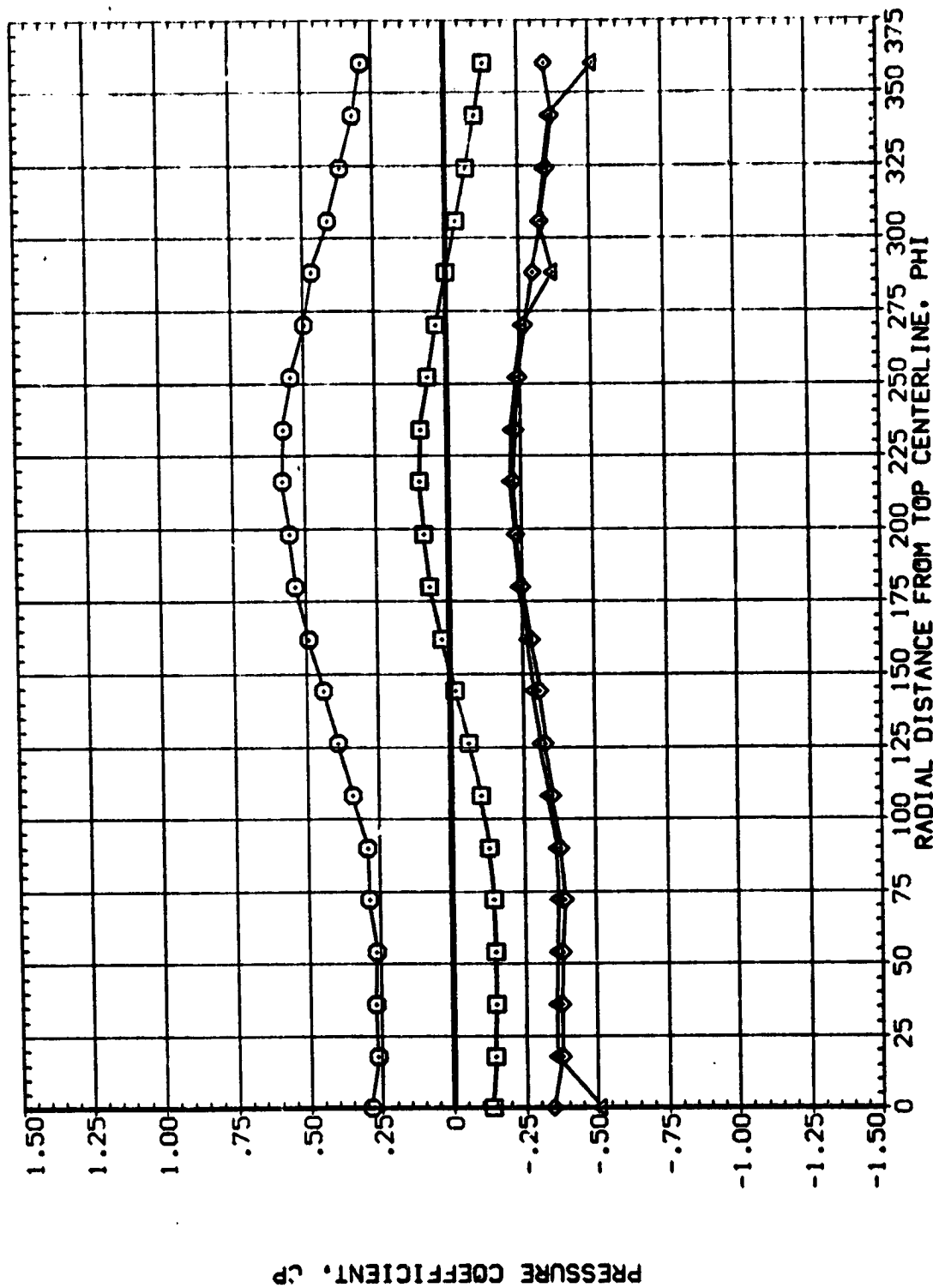
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50 IN.	ALPHA	5.000	CONF 16
0	.984	.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	.140	R001R
								IN.	X-SRB	.000	DRB INC
								IN.			500
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

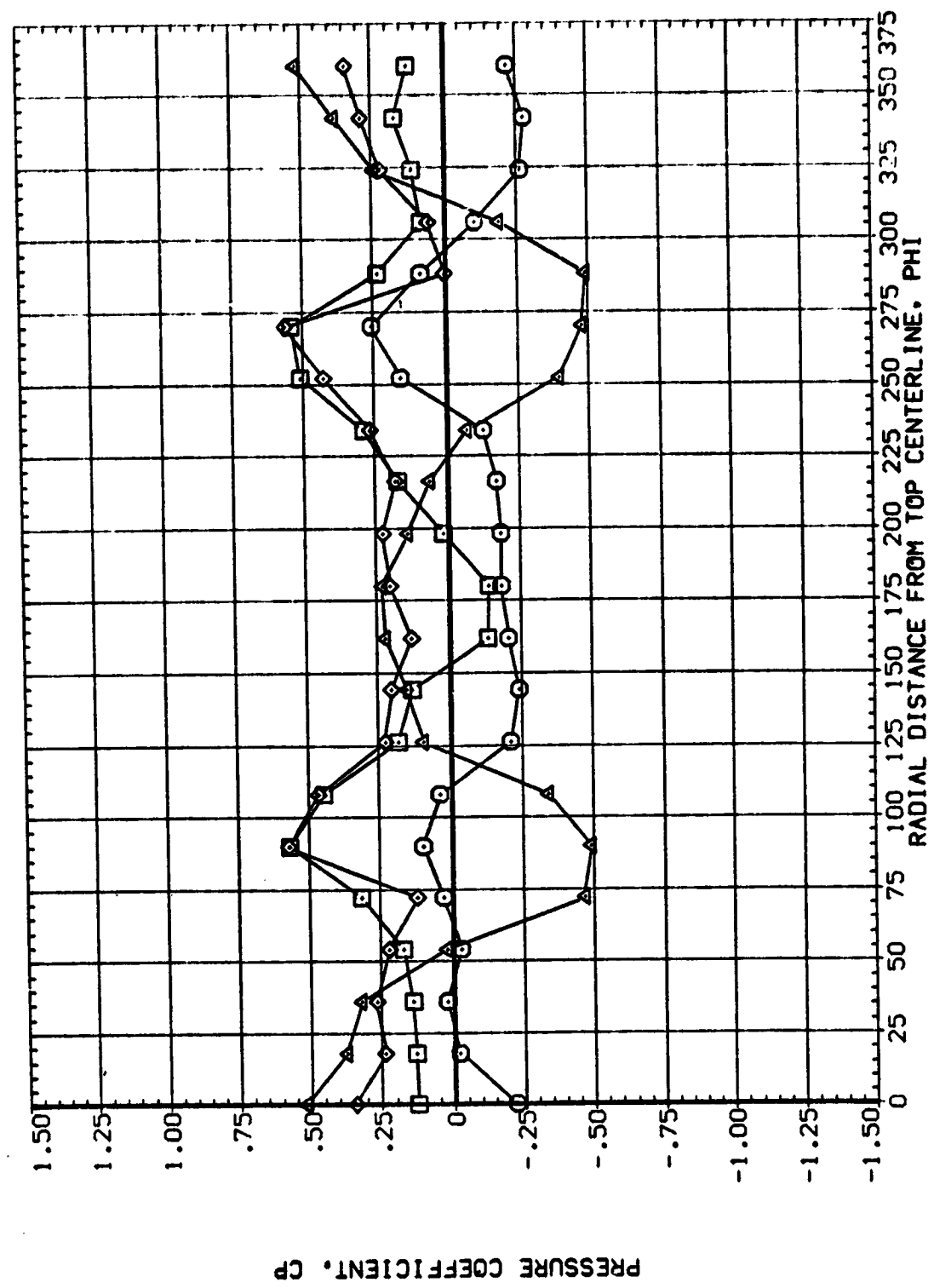
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					SREF	LREF	BREF	YMRP	ZMRP	SO. IN.	ALPHA	CONF 16
○	.076		4.000	1.250	6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	RUDDER
□	.155									IN.	X-SRB	.000
◇	.220									IN.		.500
△	.235									IN.		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XTRP	5.000	CONFIG	50.000	DOCC
○	.271	4.000	1.250	6.198	5.313	5.313	2.549	.140	RLODER	.000	.500
□	.314							.000	ORBINC		
◇	.350										
△	.382										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T03)

SYMBOL

X/LT

BETA

MACH

1.250

4.000

0.438

0.506

0.573

0.641

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

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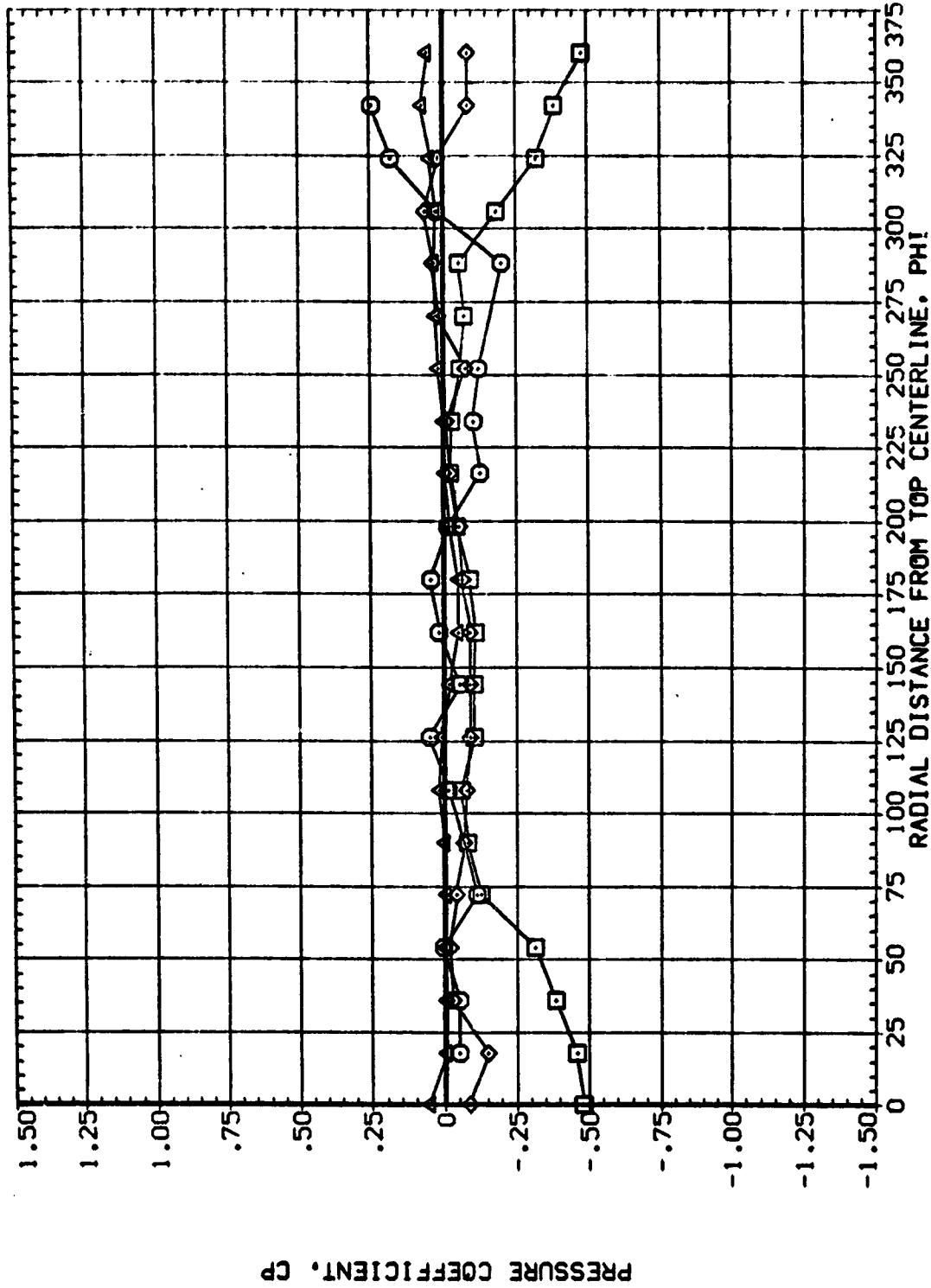
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RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL

X/LT

BETA

MACH

REFERENCE DATA

SREF  
LREF  
BREF  
XREF  
YREF  
ZREF

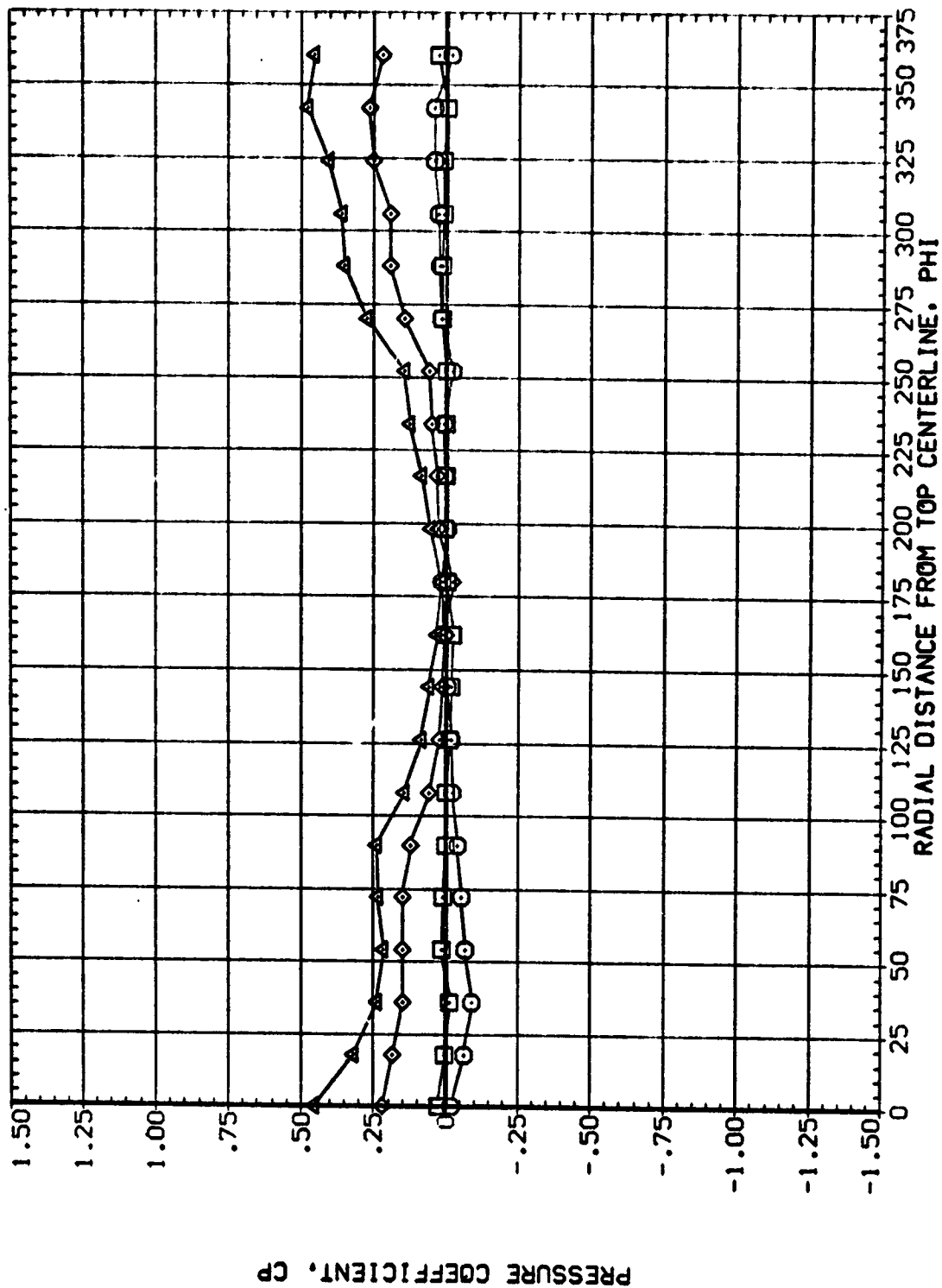
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5.313  
2.549  
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.000

50. IN.  
IN.  
IN.  
IN.  
IN.  
IN.

PARAMETRIC VALUES

5.000  
.140  
.000  
CONFIG  
RUDDER  
ORBITAL

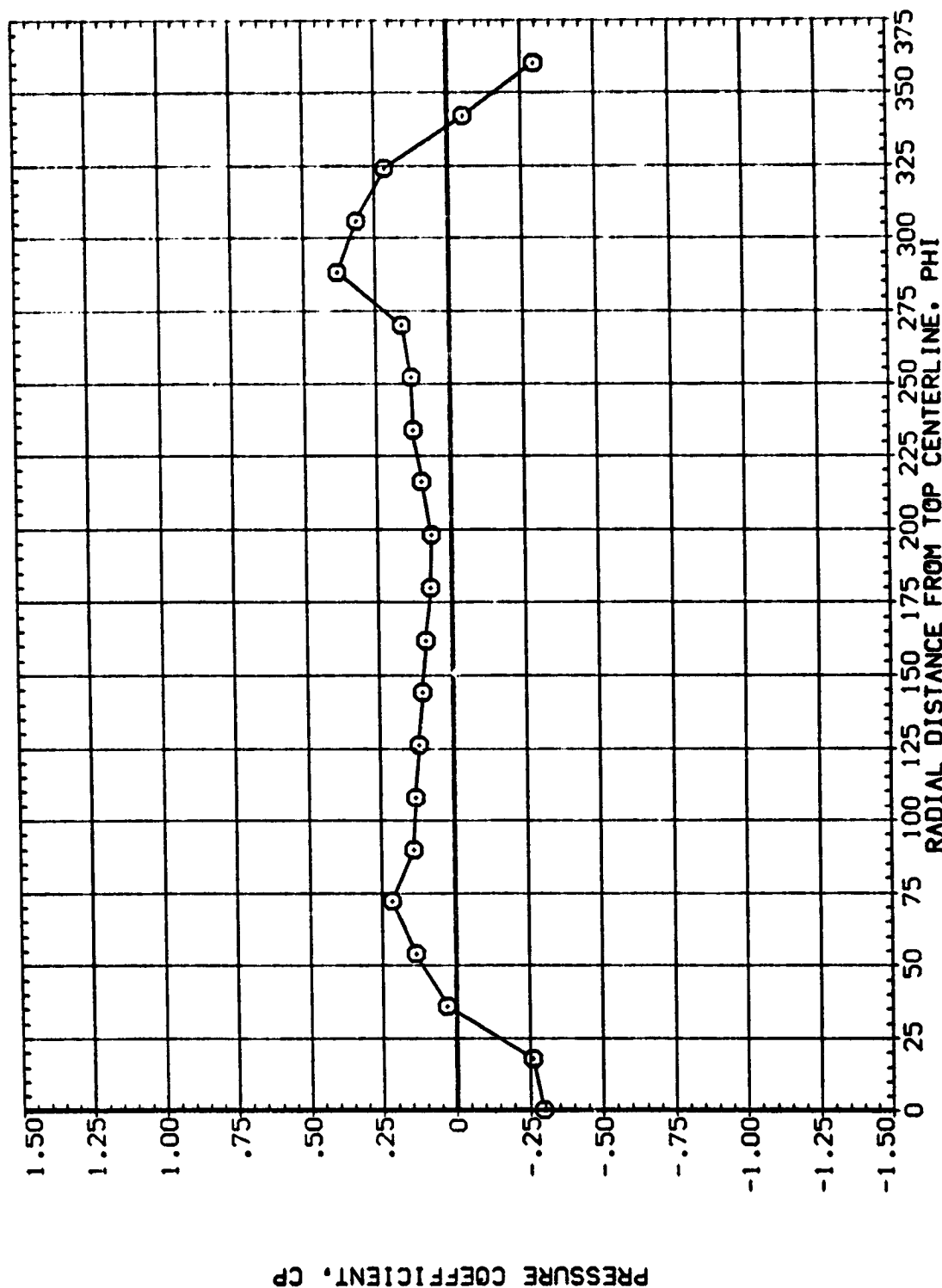
90.000  
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.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

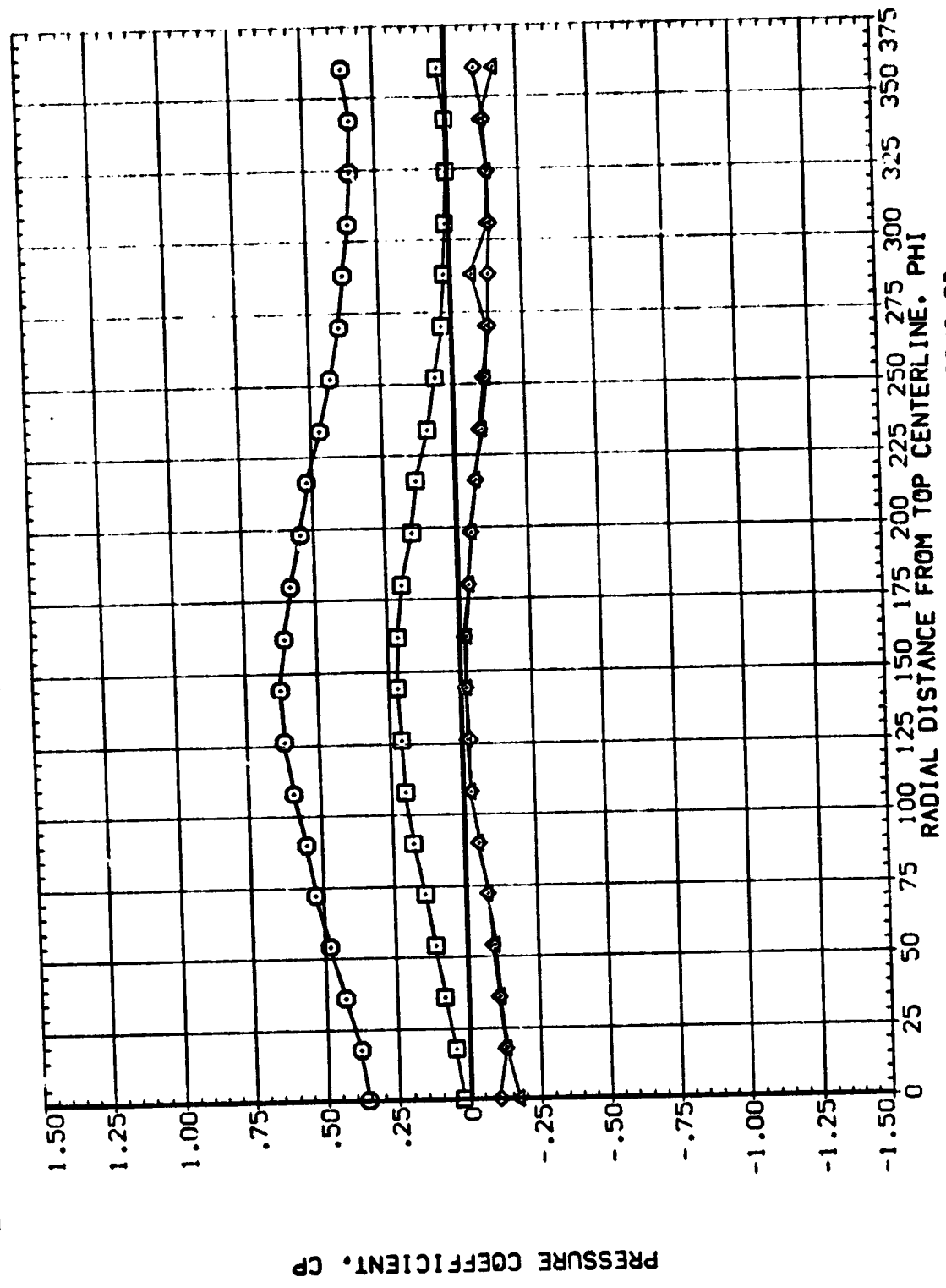
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	5Q, IN.	ALPHA	CONF IG	90,000
0	.994	4.000	1.250	5.313	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
				.000	.000	.000	.000	IN.	X-SRB	ORBITAL	.500
				ZMRP				IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03      EXTERNAL TANK (A82T03)

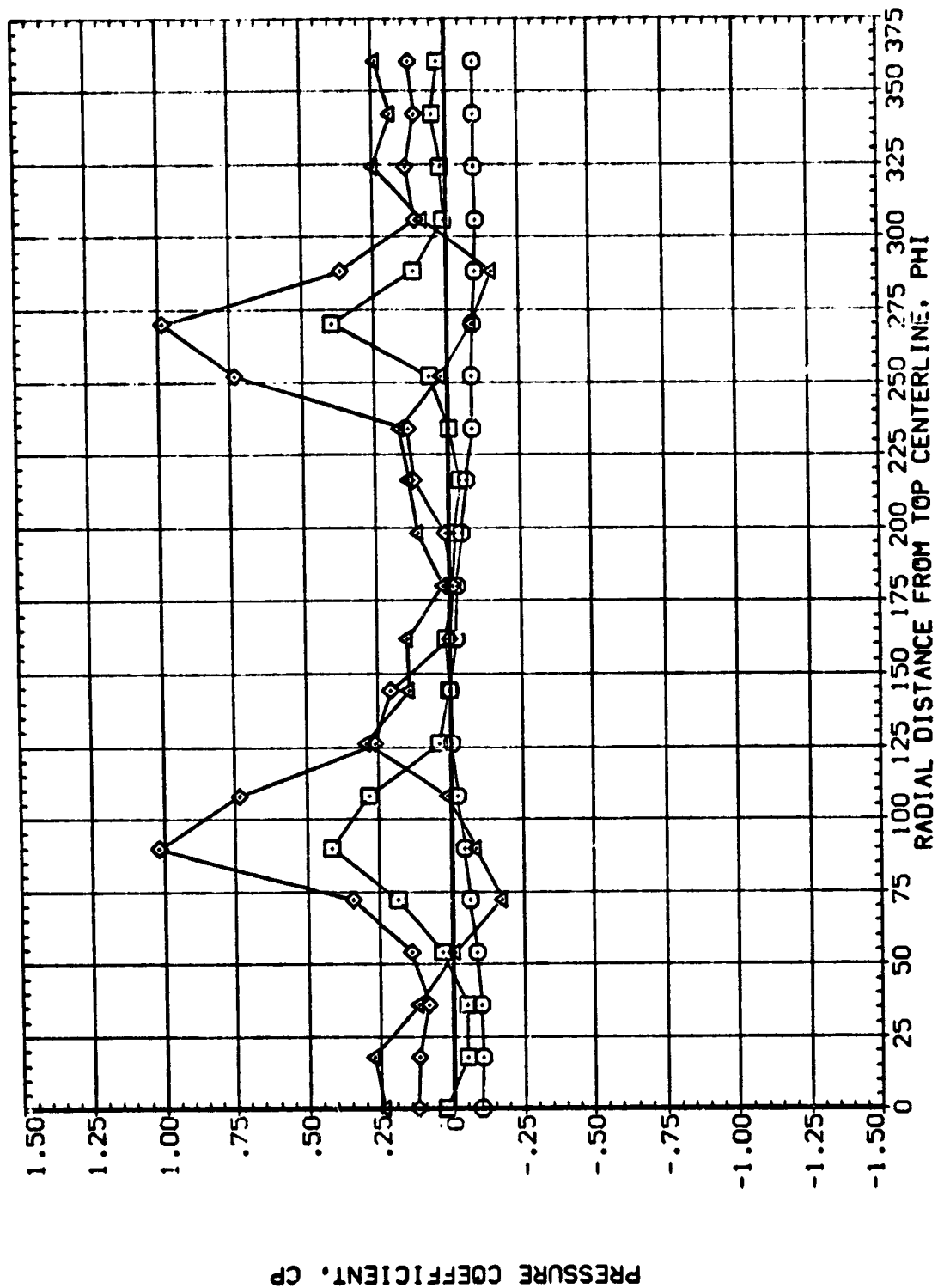
SYMBOL		X/LT		BETA		MACH		REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
◇		.076		-4.000		1.960		SREF	6.198	SO. IN.		5.000	CONF IG
□		.155						LREF	5.313	IN.		.140	RUDDER
◇		.220						BREF	5.313	IN.		.000	CRBINC
△		.235						XTRP	2.549	IN.			
								ZTRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CONFIG	CL
◇	.271	-4.000	1.960	6.198	5.313	5.313	2.549	50. IN.	1.5RB	5.000	90.000
□	.314							IN.		.140	.000
△	.350							IN.		.000	.500
○	.82							IN.			

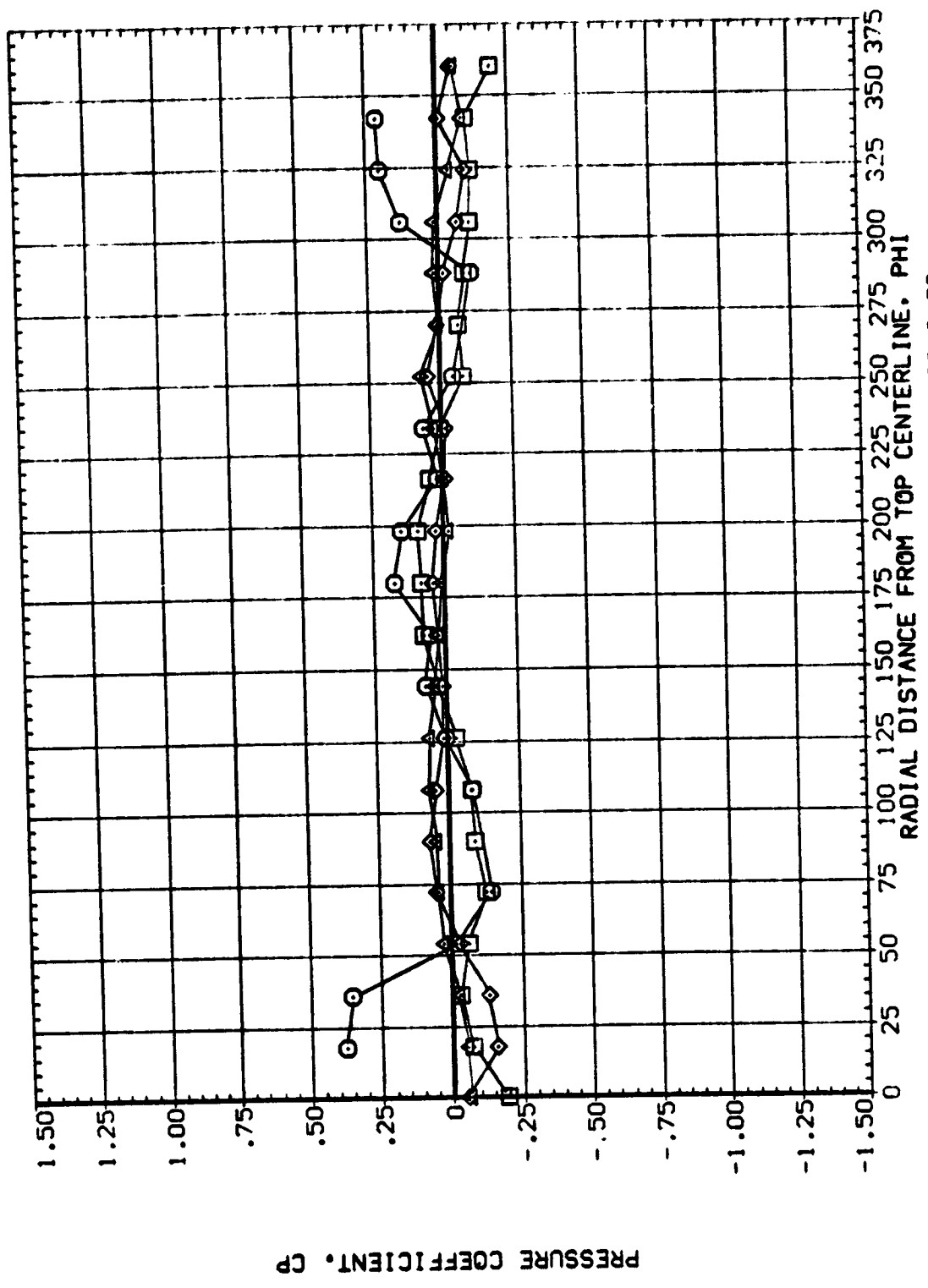


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	ALPHA	CONF IG
○	.438	-4.000	1.960	LREF	IN.	.140	RUDDER
□	.506			BREF	IN.	.000	ORB INC
◇	.573			XMRP	IN.		
				YMRP	IN.		
△	.641			ZMRP	IN.		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ◇  
 □  
 △

X/LT .708  
 .776  
 .844  
 .912

BETA -4.000

MACH 1.960

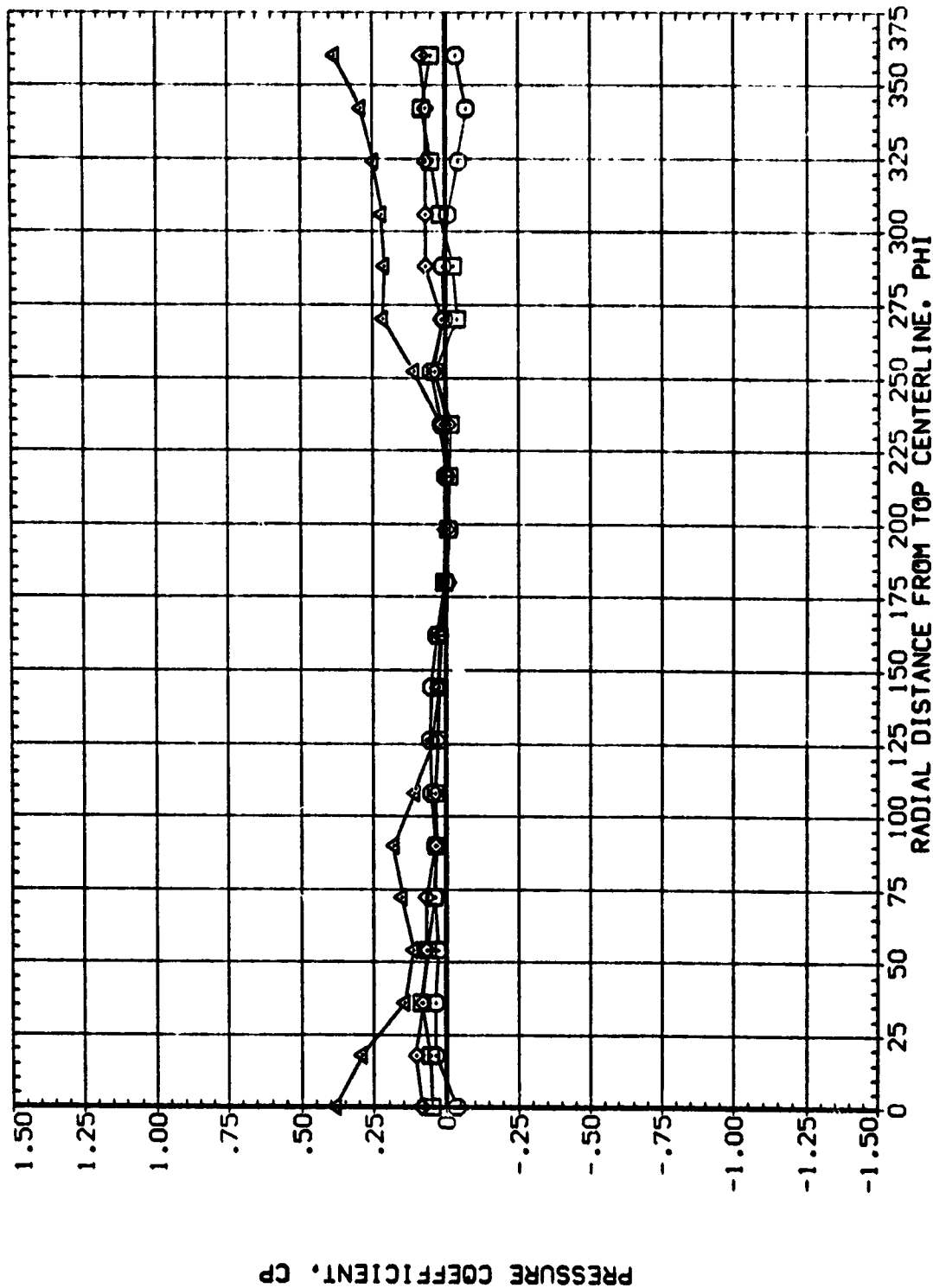
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 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

IN. IN. IN. IN. IN. IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 5.000 CONF IG  
 .140 RUDDER  
 .000 ORBINC

90.000  
 .000  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

**SYMBOL** **O**

174  
984

**BETA**  
**-4.000**

1.960

REF  
SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP

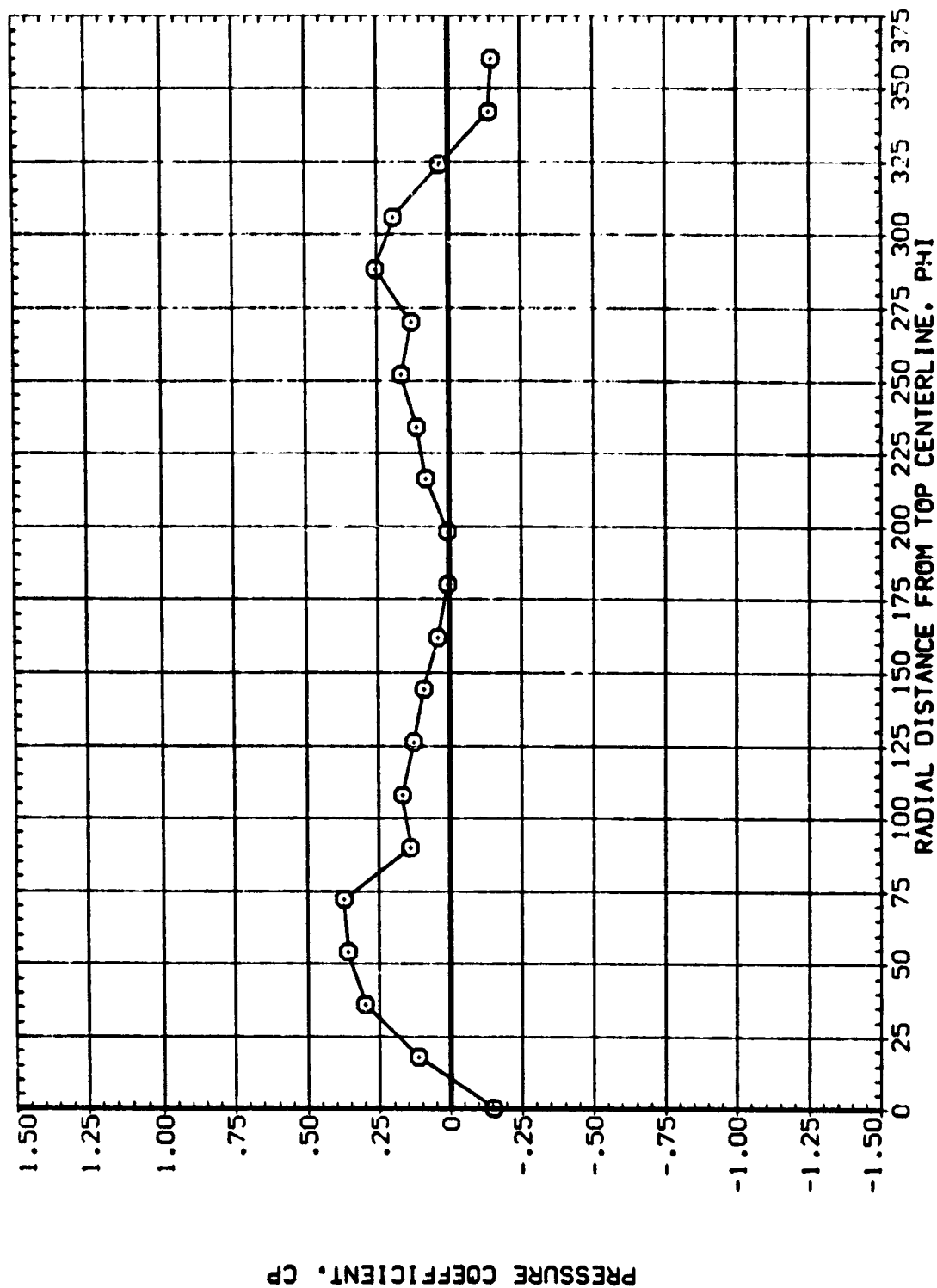
DATA	5.198
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	5.313
	2.549
	.000
	.000

z  
qzzzzz

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES	
5.000	CONFIS
.140	RJODER
.000	ORBINC

335.  
336.  
337.



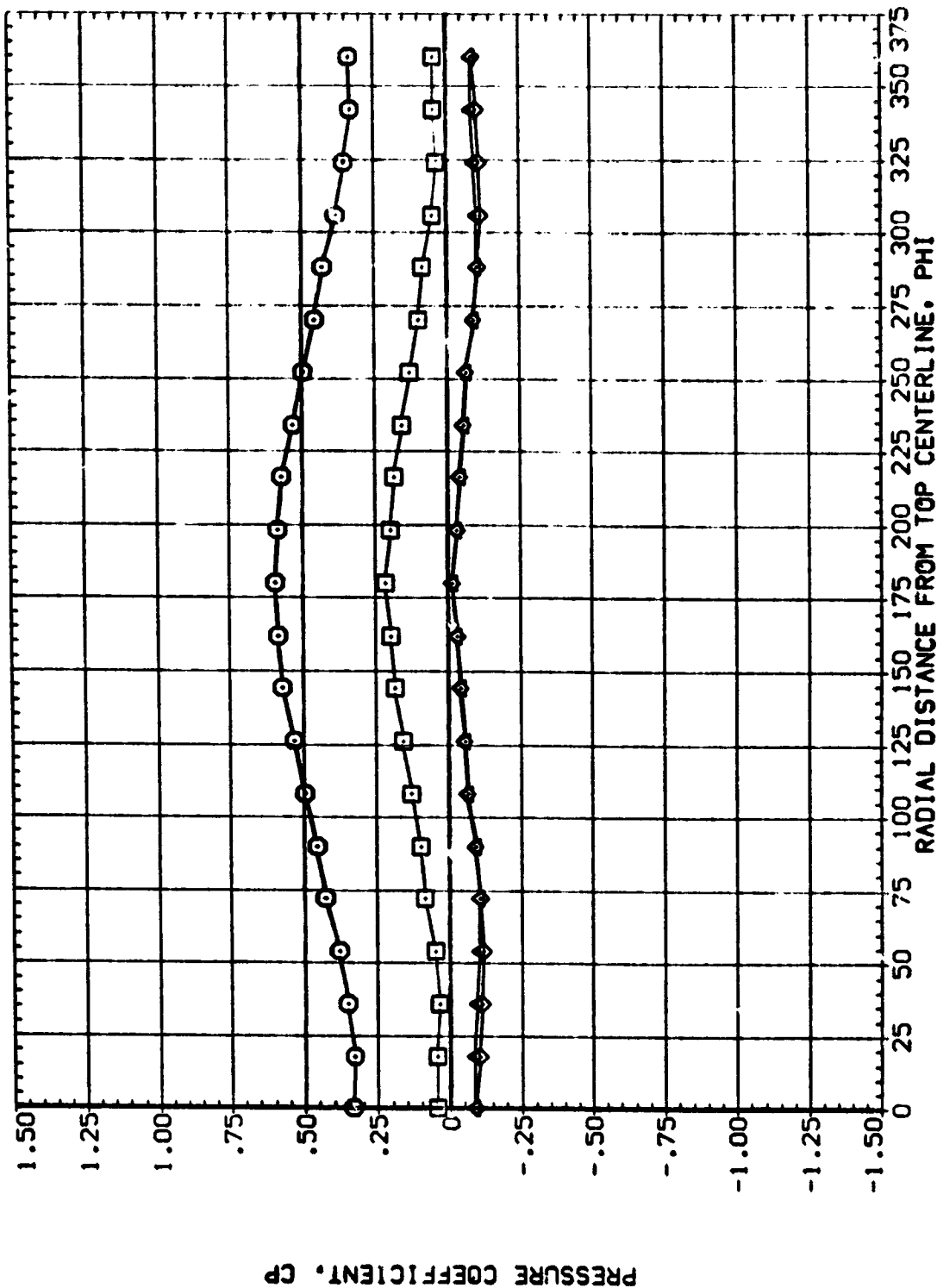
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL K/LT BETA MACH  
 ○ .076 .000 1.960  
 □ .155  
 ◇ .220  
 △ .235

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

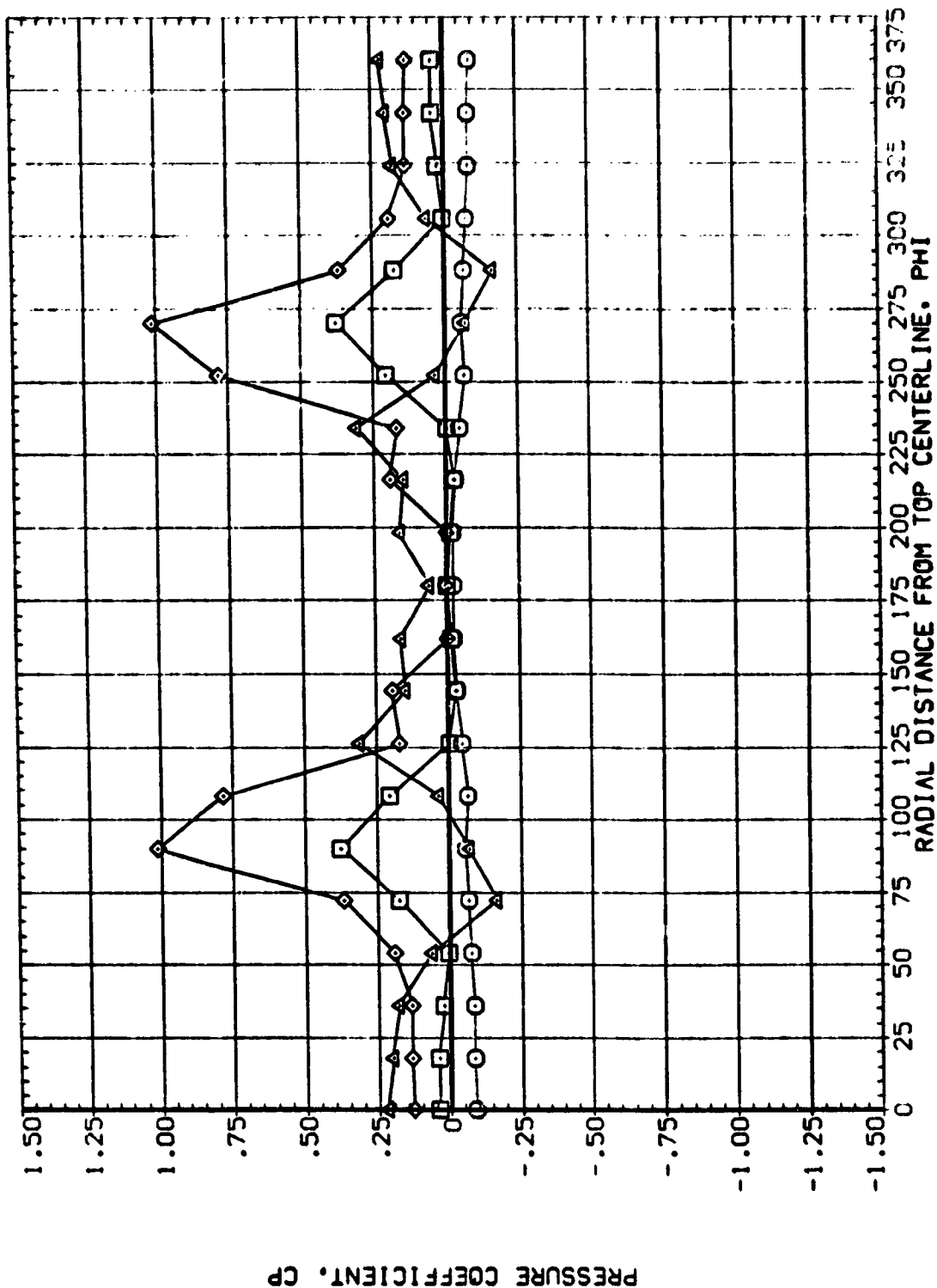
PARAMETRIC VALUES  
 ALPHA 5.000  
 DELTAZ .140  
 1-SRB .000  
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 50.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

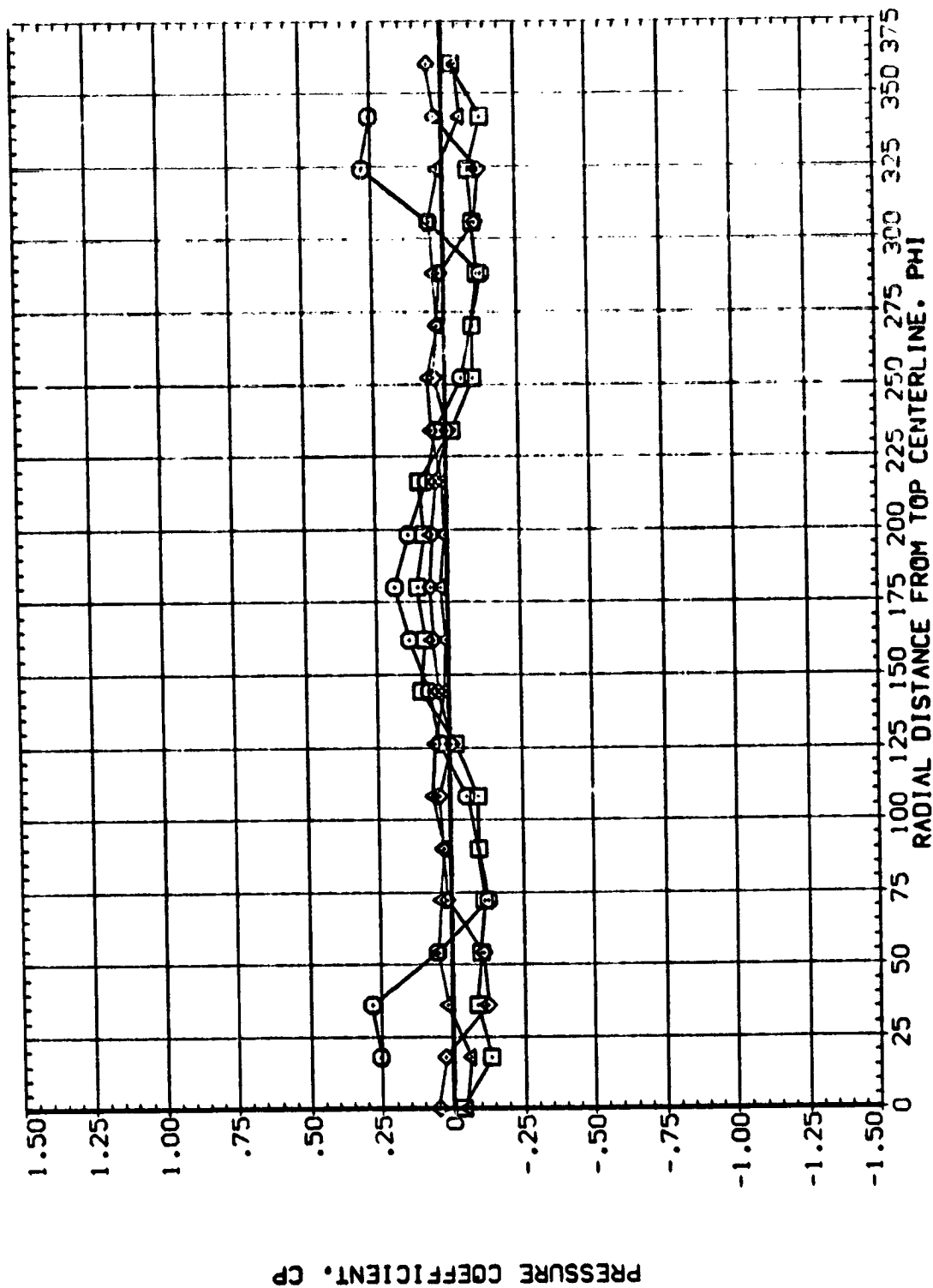
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
◇	.271	.000	1.960	SREF 6.198	CONF IG 90.000
□	.314			LREF 5.313	.14C RUDDER .000
◇	.350			BREF 2.549	.200 DRB INC .000
△	.382			XMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03

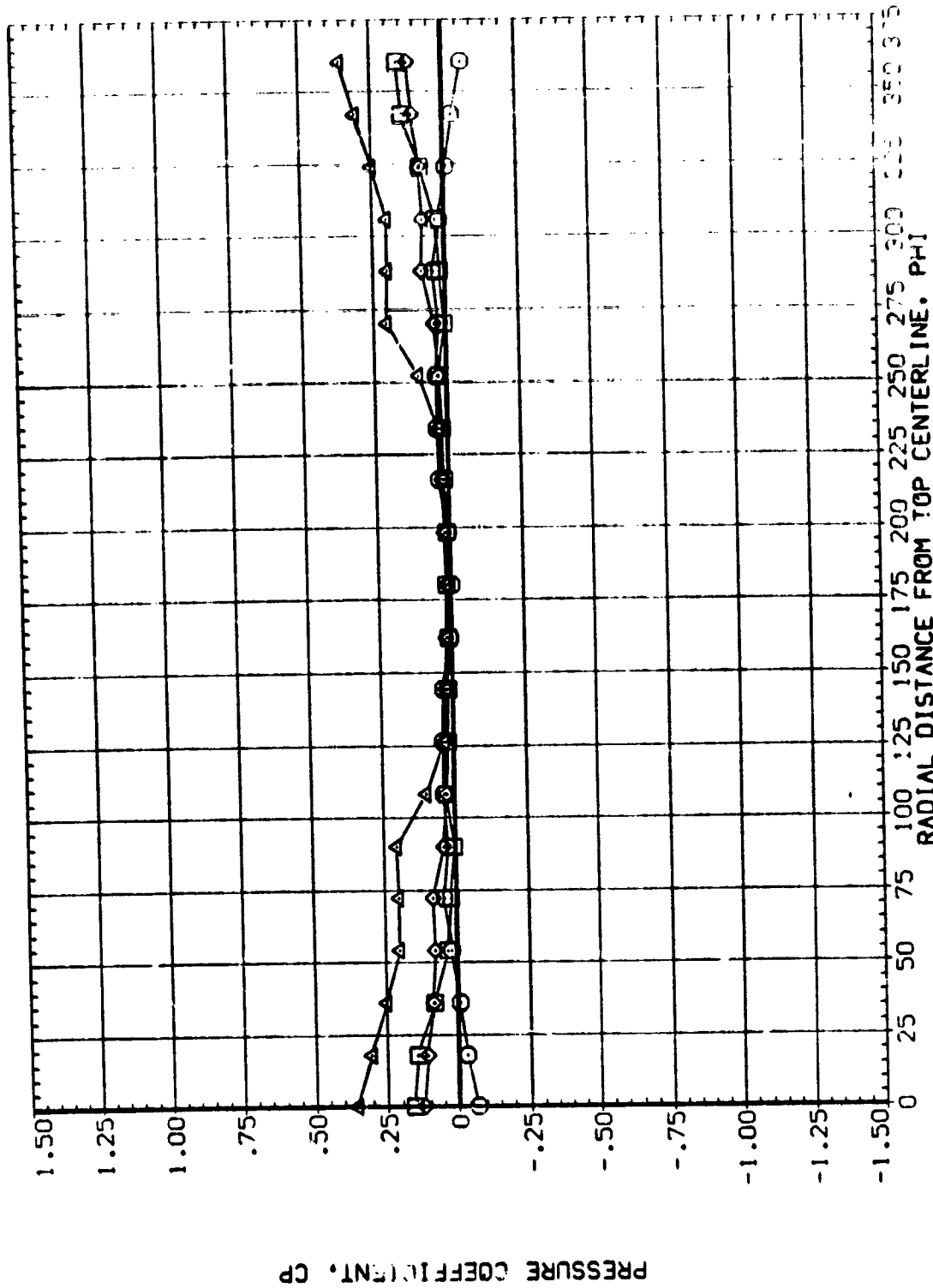
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306.  
300.05



PAGE 520

MSFC 567(:A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T03)

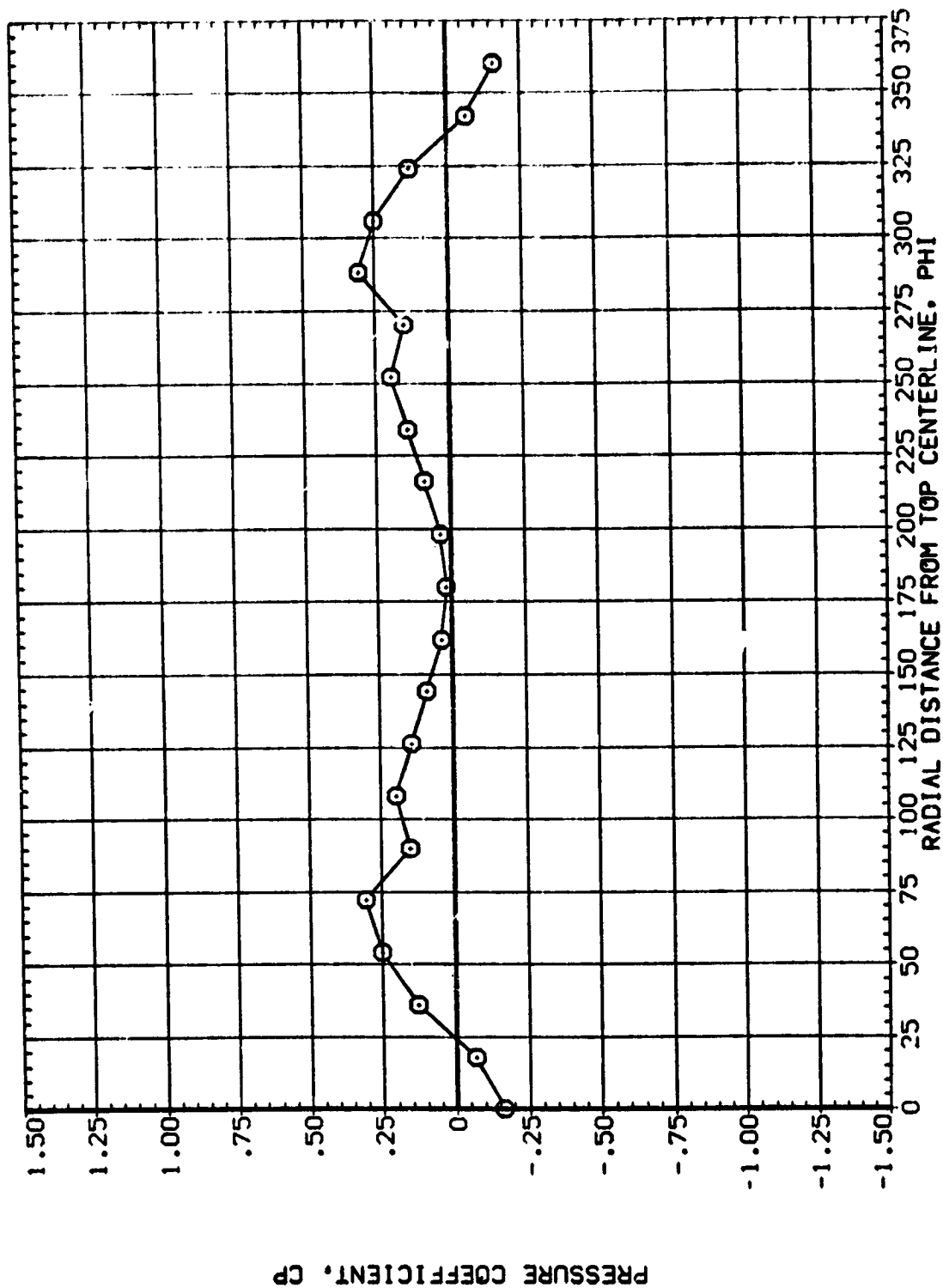
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.708	.000	1.960	SREF 6.198	5.000
□	.776			LREF 5.313	.14C
◇	.844			BREF 2.549	.000
△	.912			YMRP .000	.50C
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XPRP	SQ. IN.	ALPHA	CONF IG	SO.000
○	.984	.0	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
								IN.	X-SRB	ORBING	.500
								IN.			
								IN.			



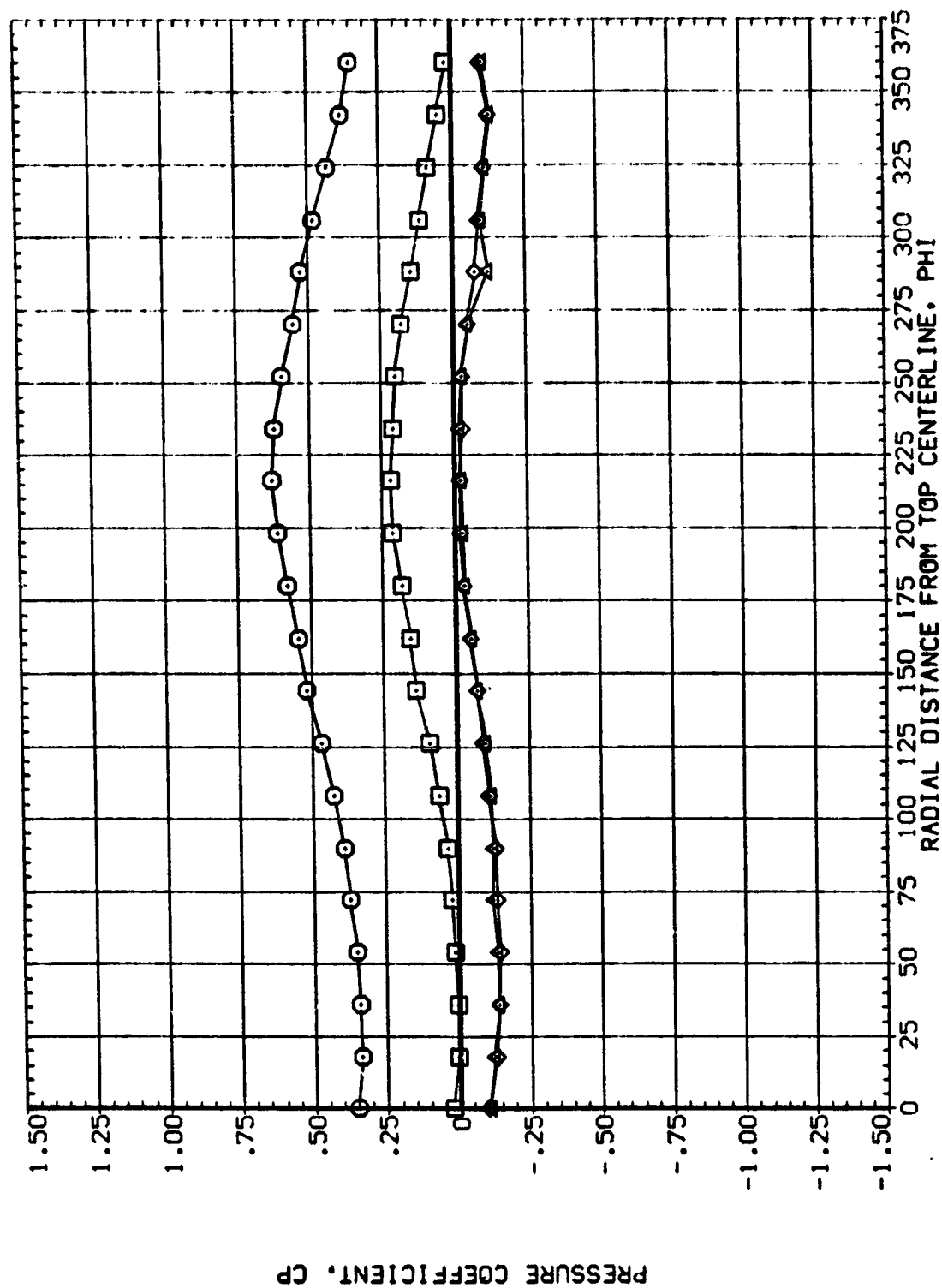
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		ALPHA DELTA Z X-SRB	PARAMETRIC VALUES	
				SREF	50. IN.		5.000	CONF 1G
○	.076	4.000	1.960	SREF	6.198	ALPHA	.140	RUDER
□	.155			BREF	5.313	DELTA Z	.000	ORBITAL
◇	.220			XMRP	2.549	X-SRB		
△	.235			YMRP	.000			
				ZMRP	.000			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

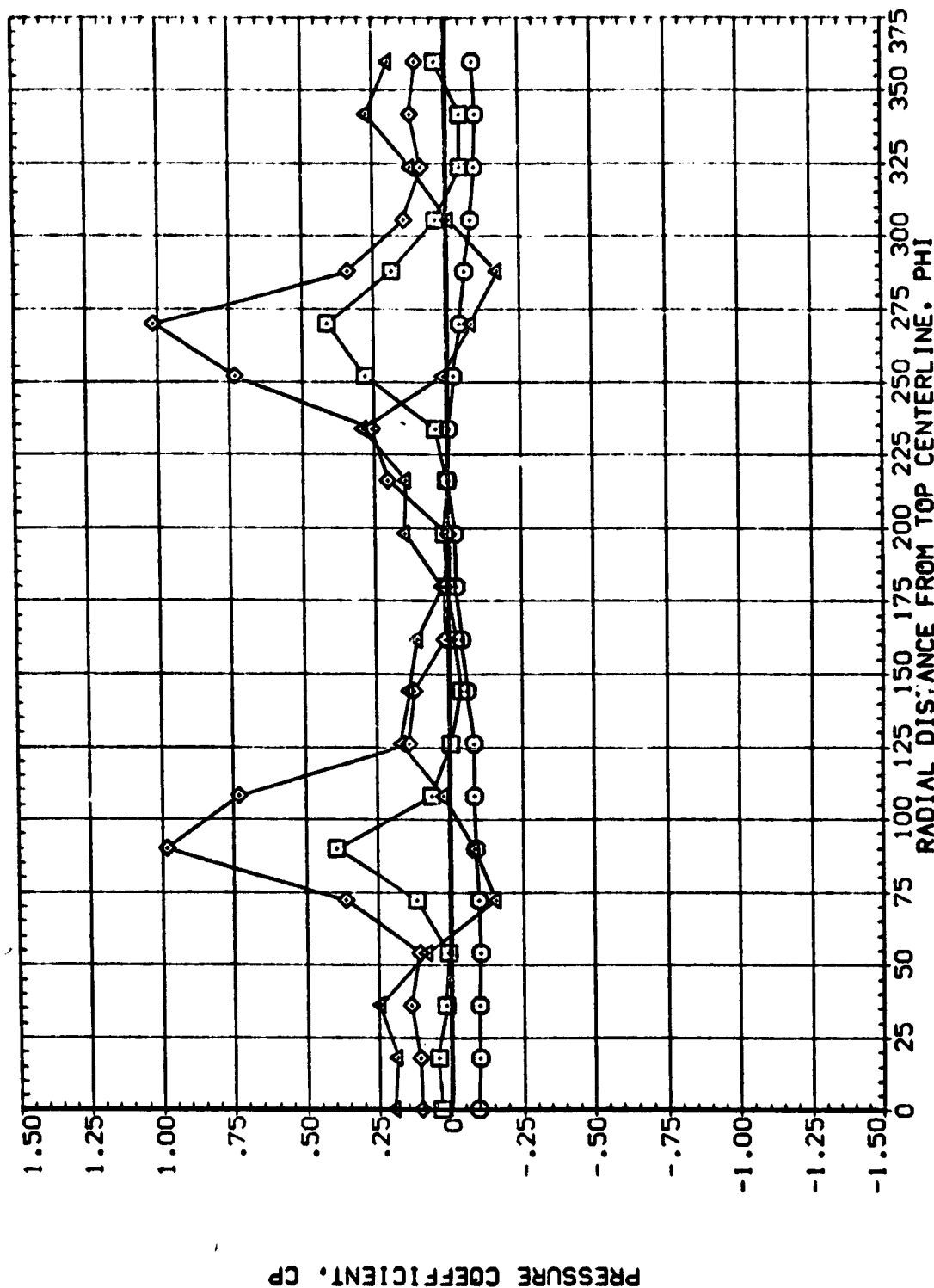
SYMBOL

X/LT .271  
.314  
.350  
.382

BETA 4.000  
MACH 1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

PARAMETRIC VALUES  
ALPHA 5.000  
DELTA Z .140  
X-SRB .000  
Y-SRB .000  
Z-SRB .500



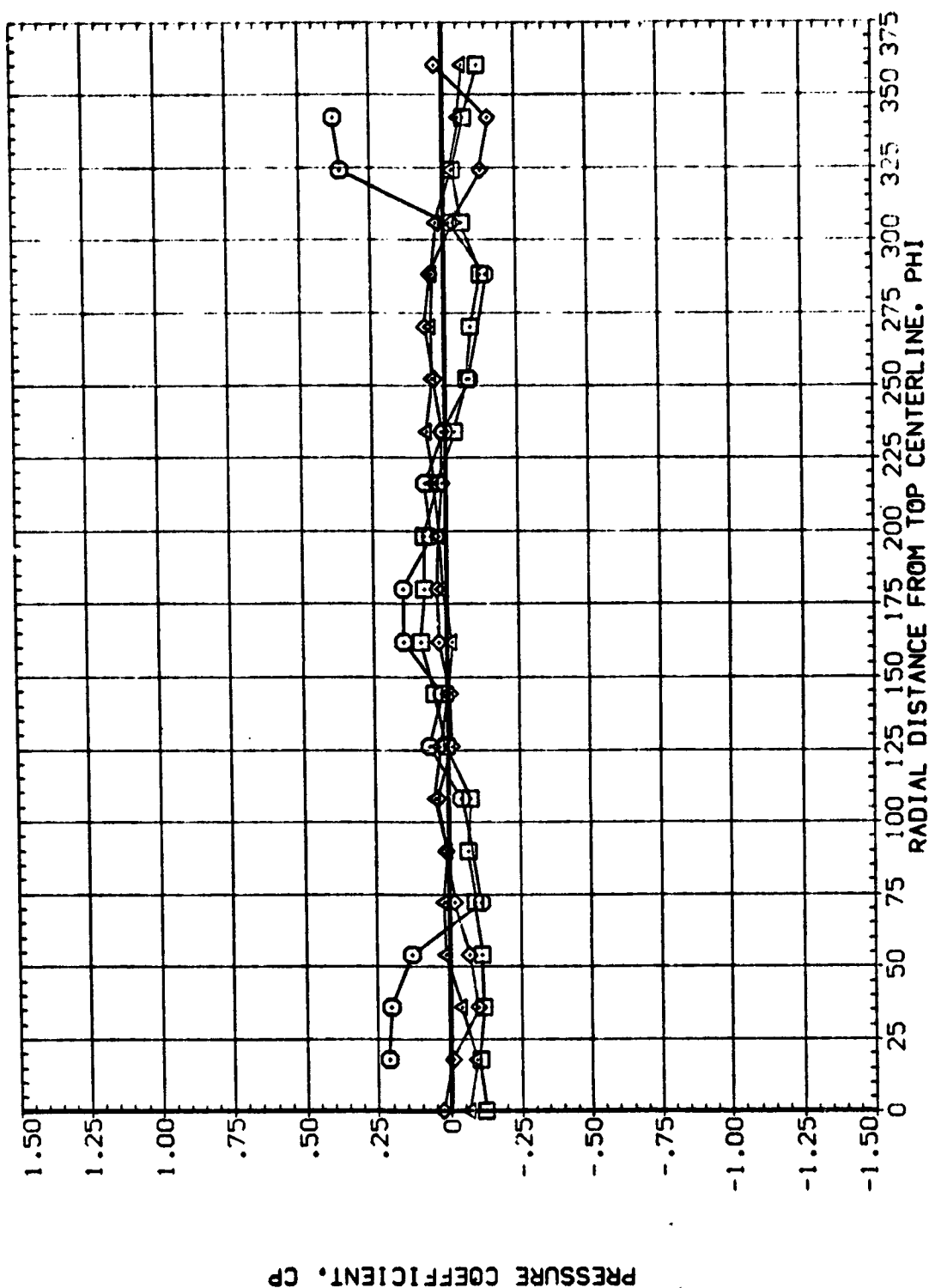
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

**SYMBOL**

X/LT	BETA	MACH
.438	4.000	1.960
.506		
.573		
.641		

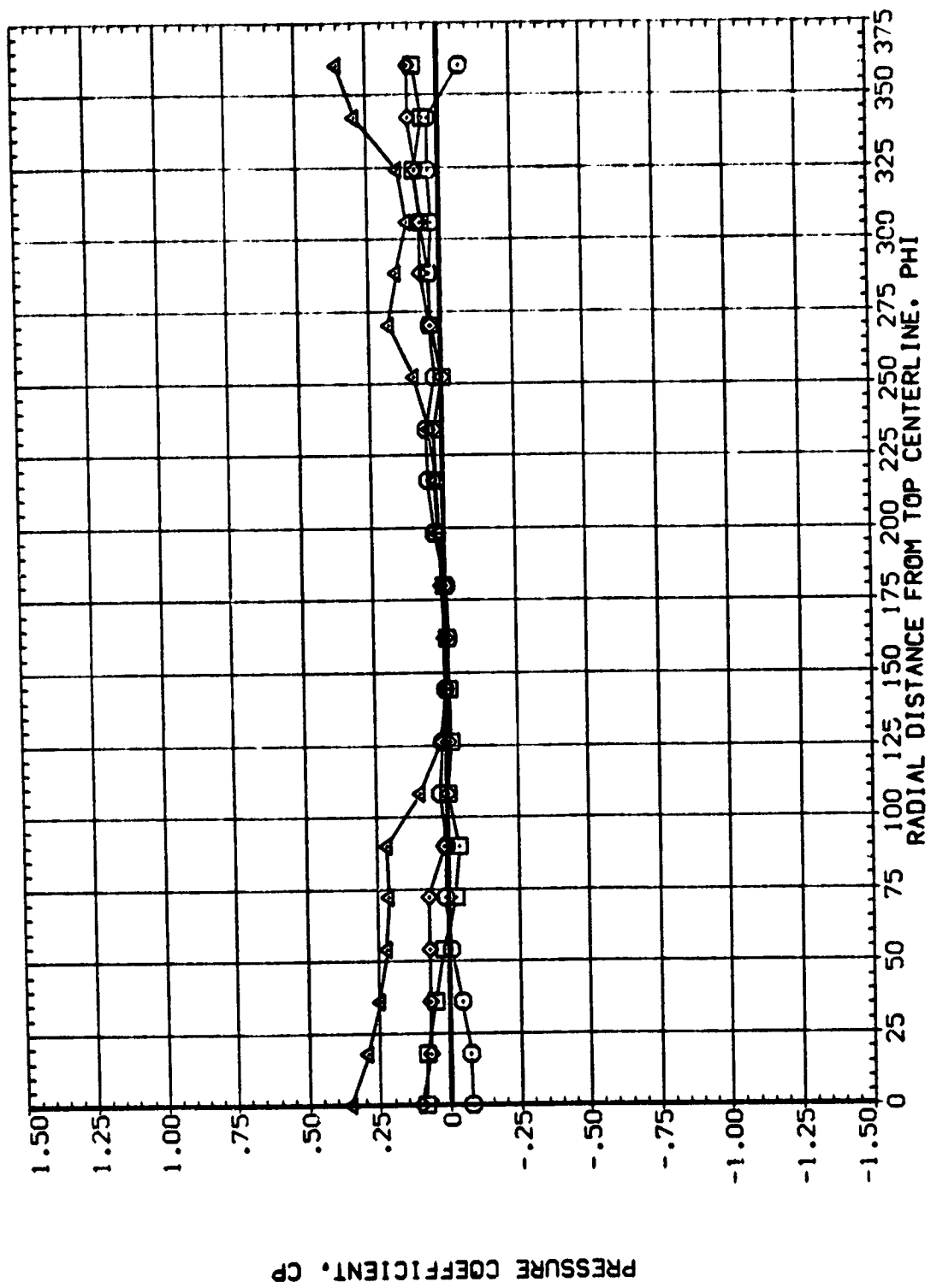
REFERENCE DATA		SO. IN.
SREF	6.198	IN.
LREF	5.313	IN.
BREF	5.313	IN.
XMRP	2.549	IN.
YMRP	.000	IN.
ZMRP	.000	IN.

PARAMETRIC VALUES		
ALPHA	5.000	CONF 16
DELTA Z	.40	RUDDER
X-SRB	.000	ORB INC
		90.000
		.000
		.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

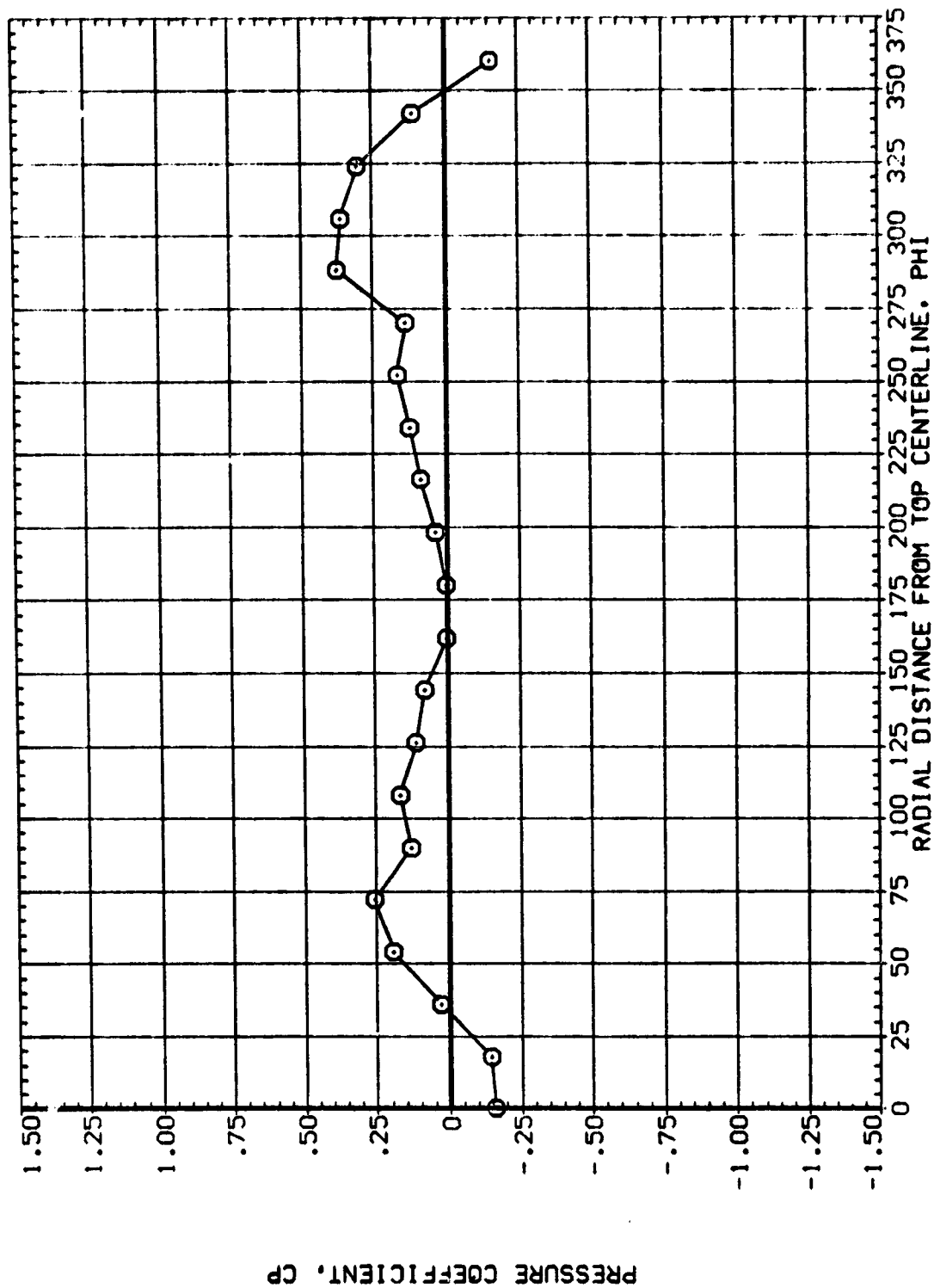
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONFIG	90.000
○	.708	4.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	RUDDER	.000
□	.776							IN.	X-SRB	ORBIT	.500
◇	.844							IN.			
△	.912							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

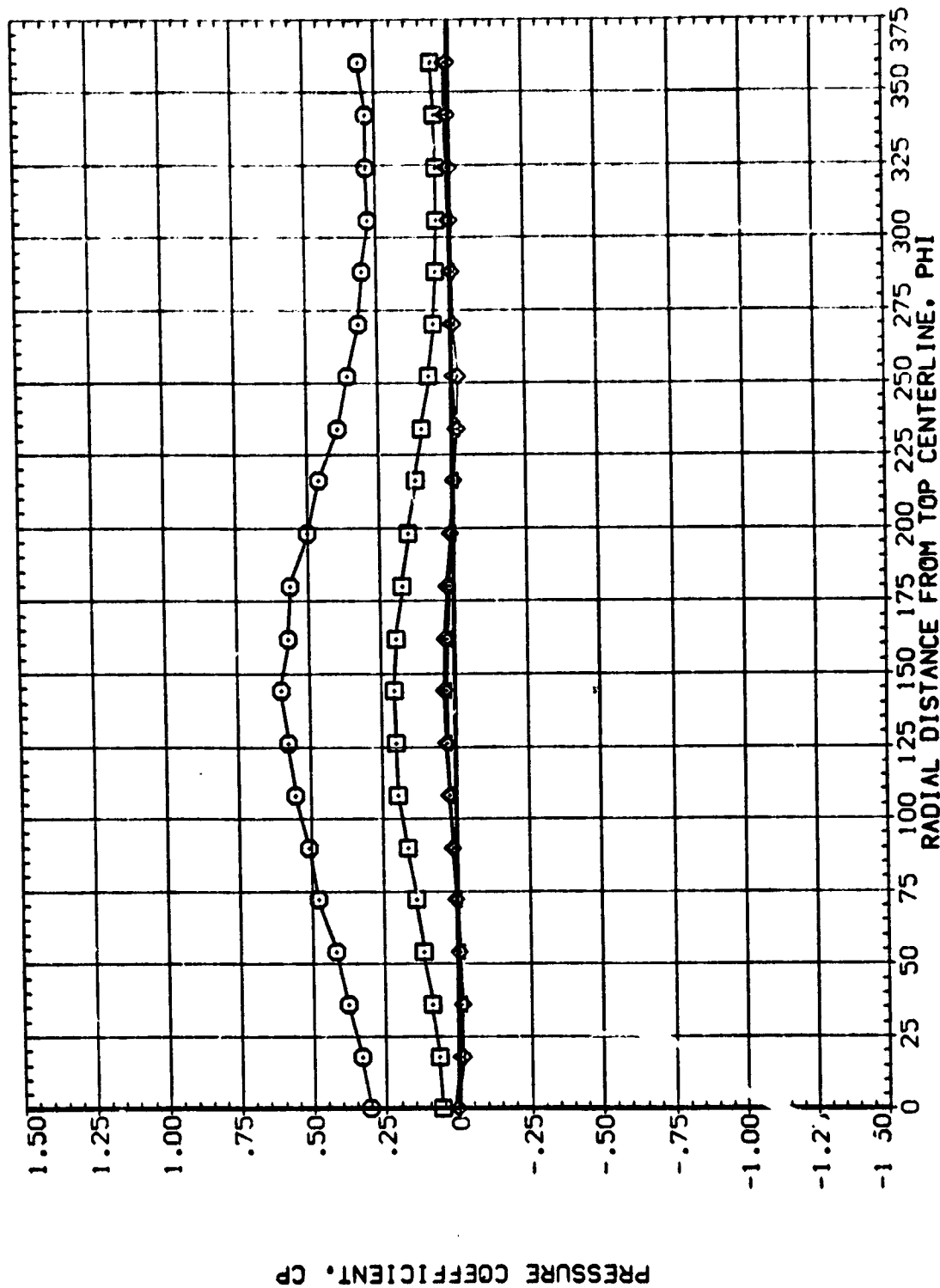
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	ALPHA	CONF IG	90.000
0	.984	4.000	1.960	6.198	5.313	5.313	2.549	IN.	DELTA Z	RLODR	.000
				.000	.000	.000	.000	IN.	X-SRB	ORBITC	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

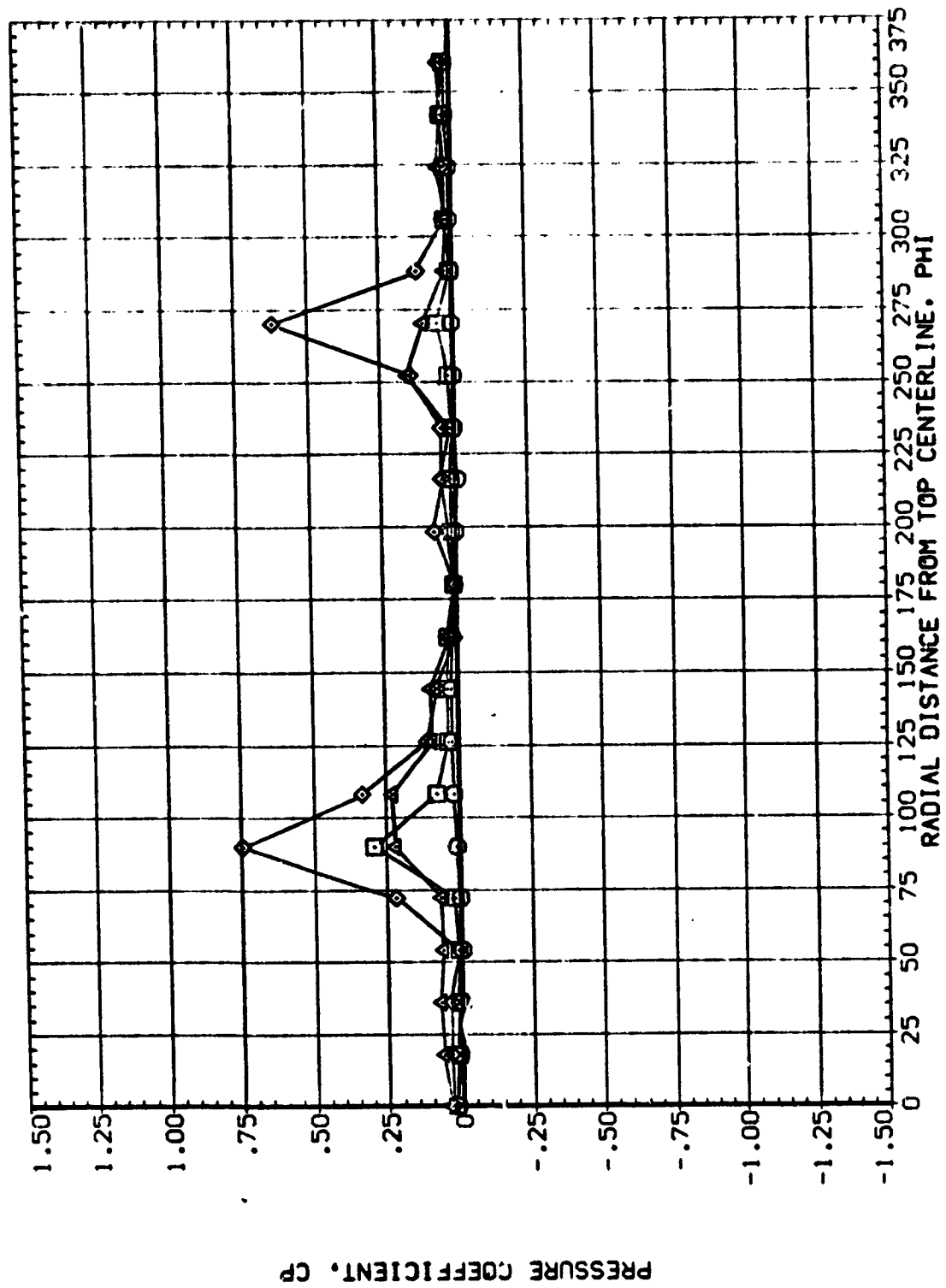
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	XRFP	ZRFP	50. IN.	ALPHA	CONF IG	90.000
○	.076	-4.000	3.480	5.313	5.313	2.549	.000	IN.	DELTA Z	RODER	.000
□	.155							IN.	X-SRB	.000	.500
△	.220							IN.			
◇	.235							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	50. IN.	ALPHA	5.000	CONF IG
□	.271	-4.000	3.480	LREF	5.313	IN.	DELTA Z	.140	RUDER
◇	.314			BREF	5.313	IN.	X-SRB	.000	DRB INC
△	.350			XMRP	2.549	IN.			
▽	.362			YMRP	.000	IN.			
				ZMRP	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
○  
□  
◇  
△

X/LT .438  
.506  
.573  
.641

BETA -4.000

MACH 3.480

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
YMRP 2.549  
ZMRP .000

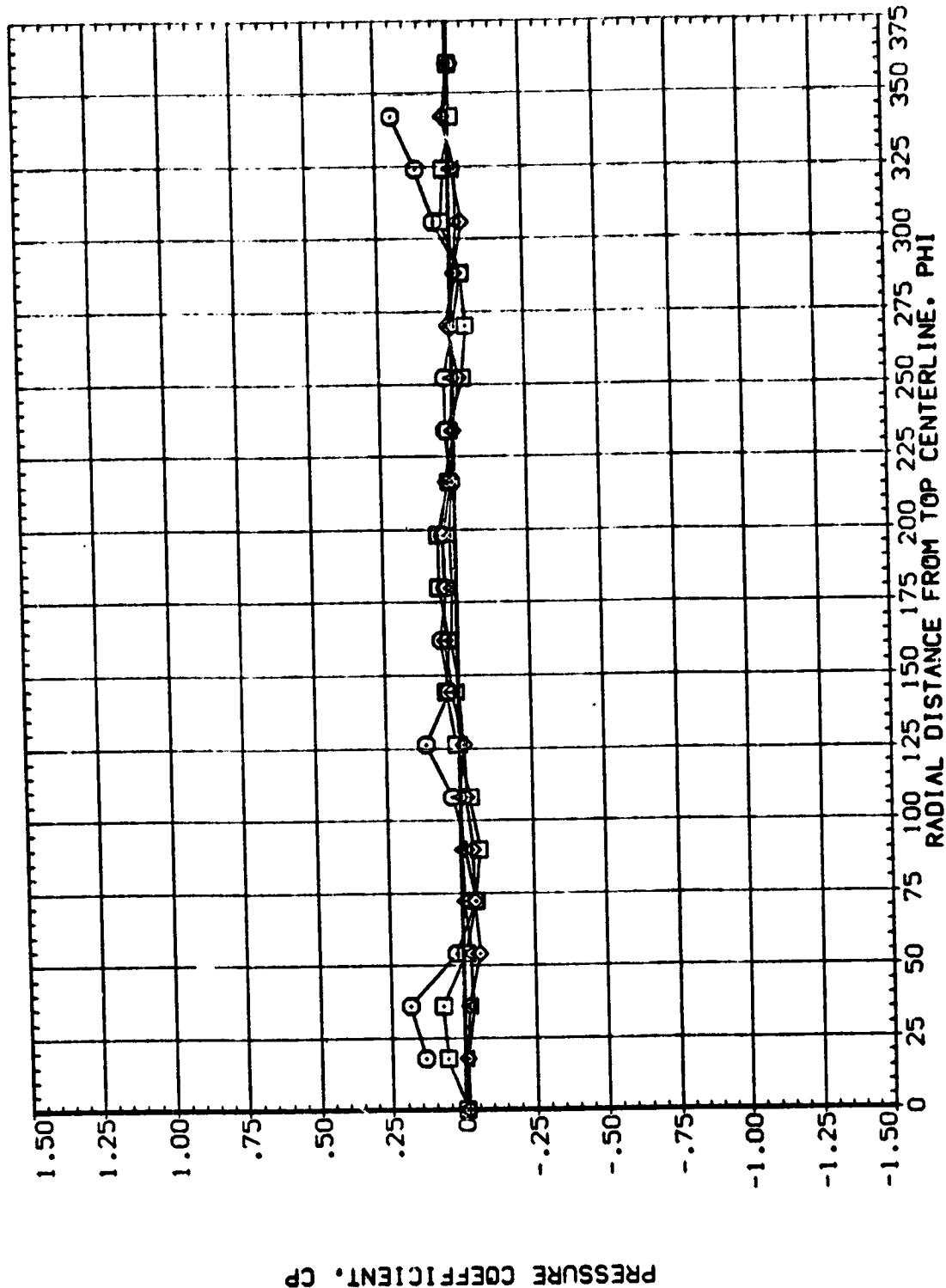
SQ. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
5.000  
.140  
.000

CONF IG  
RUDDER  
ORBITAL

90.000  
.000  
.500

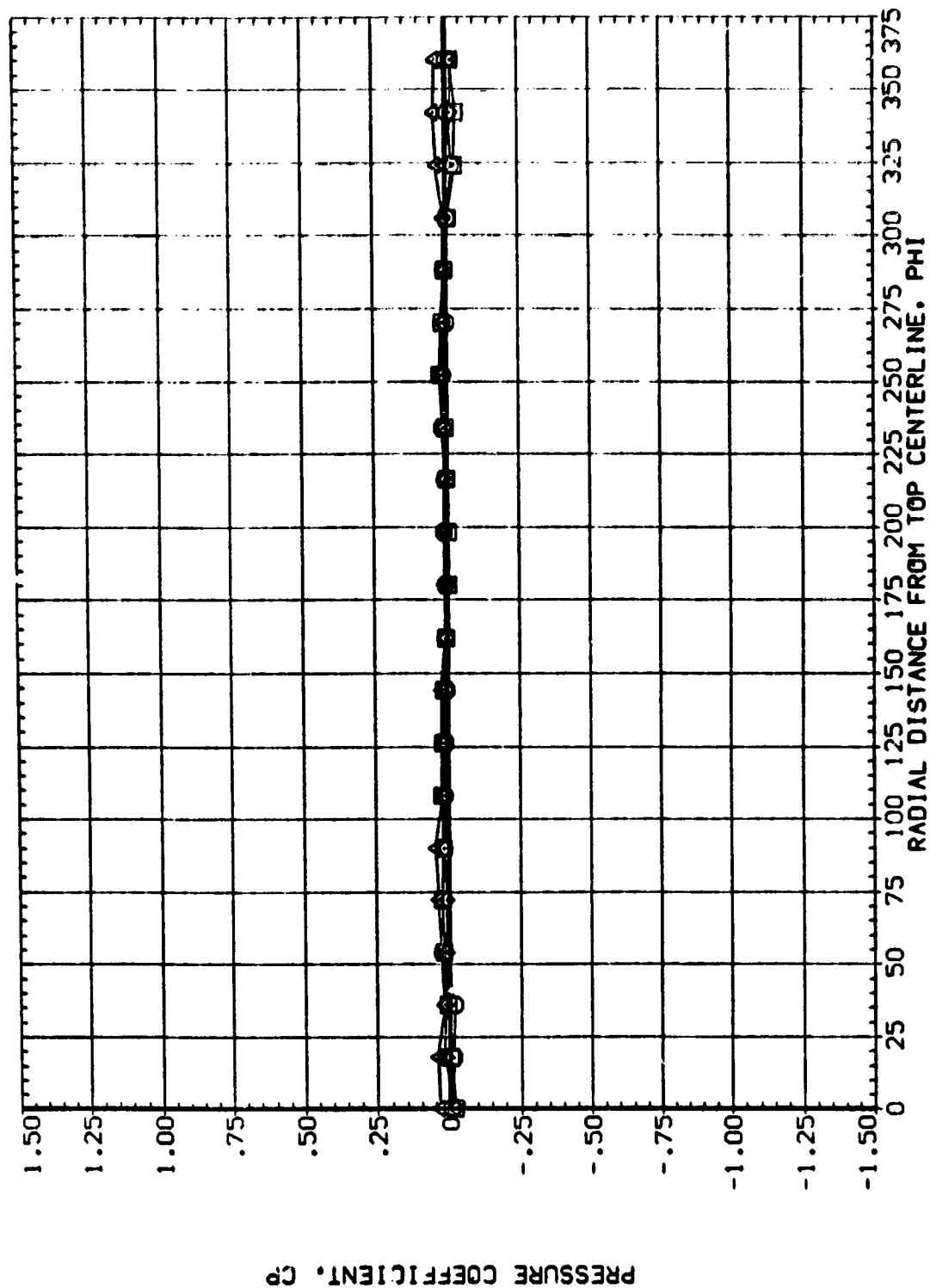


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

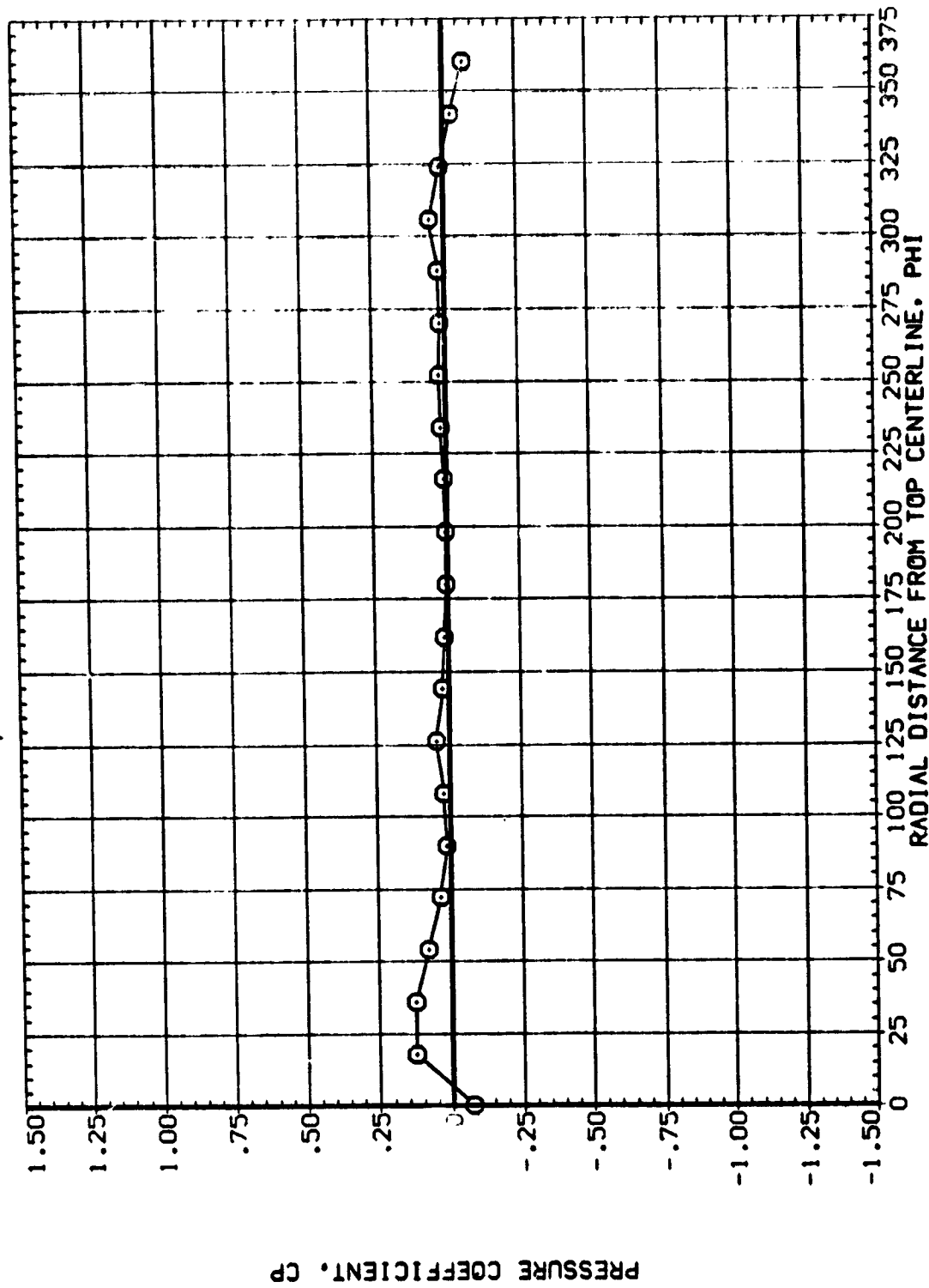
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	50. IN.	IN.	IN.
○	.708	-4.000	3.480	6.198	5.313	5.313	2.549	.000	5.000	.140	.000
□	.776										
◇	.844										
△	.912										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

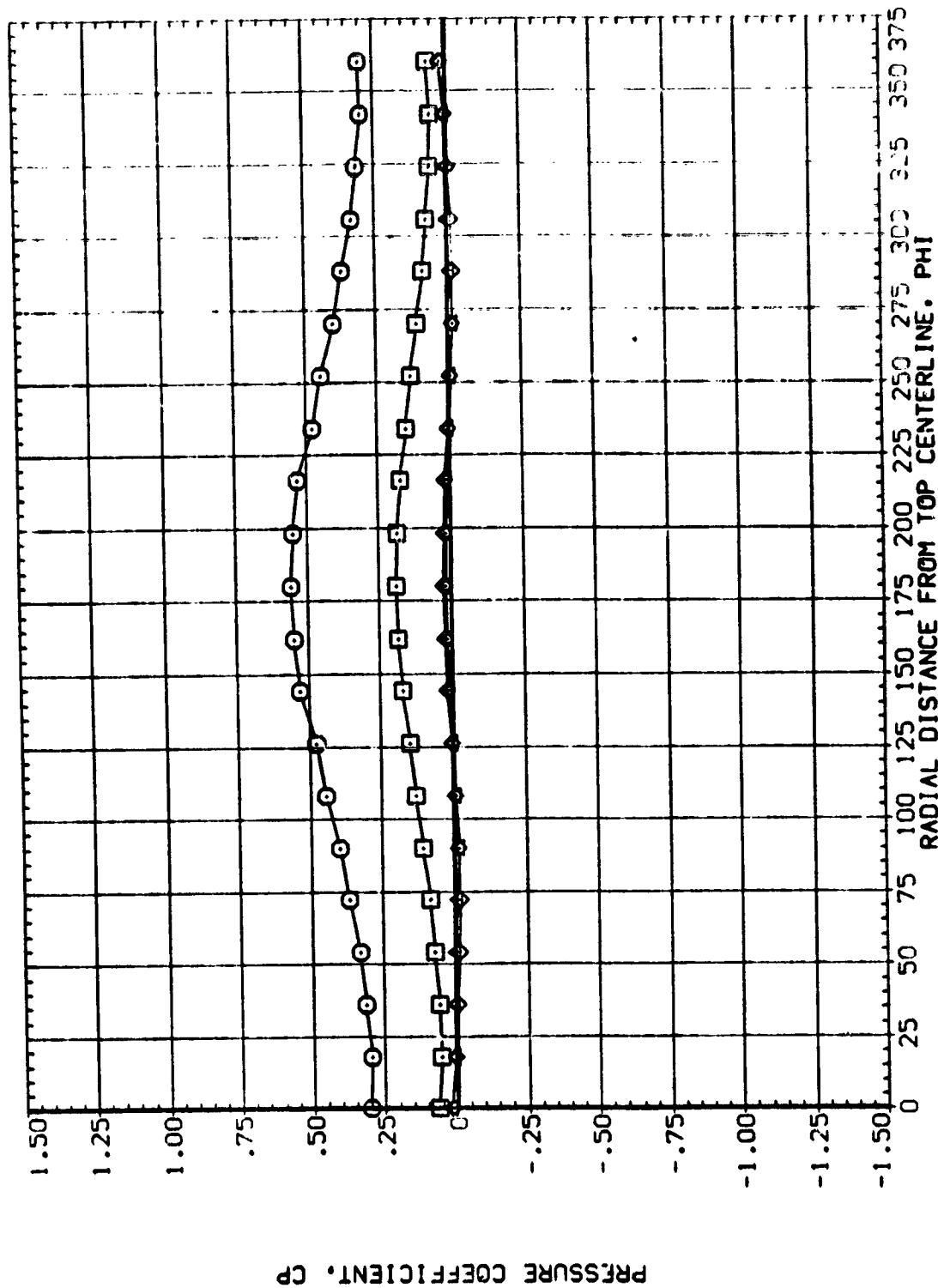
SYMBOL		X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES				
O		.964	-4.000	3.480	SREF	6.198	50. IN.	ALPHA	5.000	CONF IG	90.000
					LREF	5.313	IN.	DELTA Z	.140	RUDER	.000
					BREF	5.313	IN.	X-SRG	.000	DPB INC	.500
					XMPP	2.549	IN.				
					YMPP	.000	IN.				
					ZMPP	.000	IN.				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	6.198	50. IN.	ALPHA	CONF IG
○	.076	.000	3.480	LREF	5.313	IN.	DELTAZ	.143
□	.155			BREF	5.313	IN.	1-S98	.000
◇	.220			XMRP	2.549	IN.		.059 INC
△	.235			YMRP	.000	IN.		.502
				ZMRP	.000	IN.		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T03)

SYMBOL  
 □  
 ◇  
 △

X/LT  
 .211  
 .314  
 .350  
 .382

BETA  
 .000

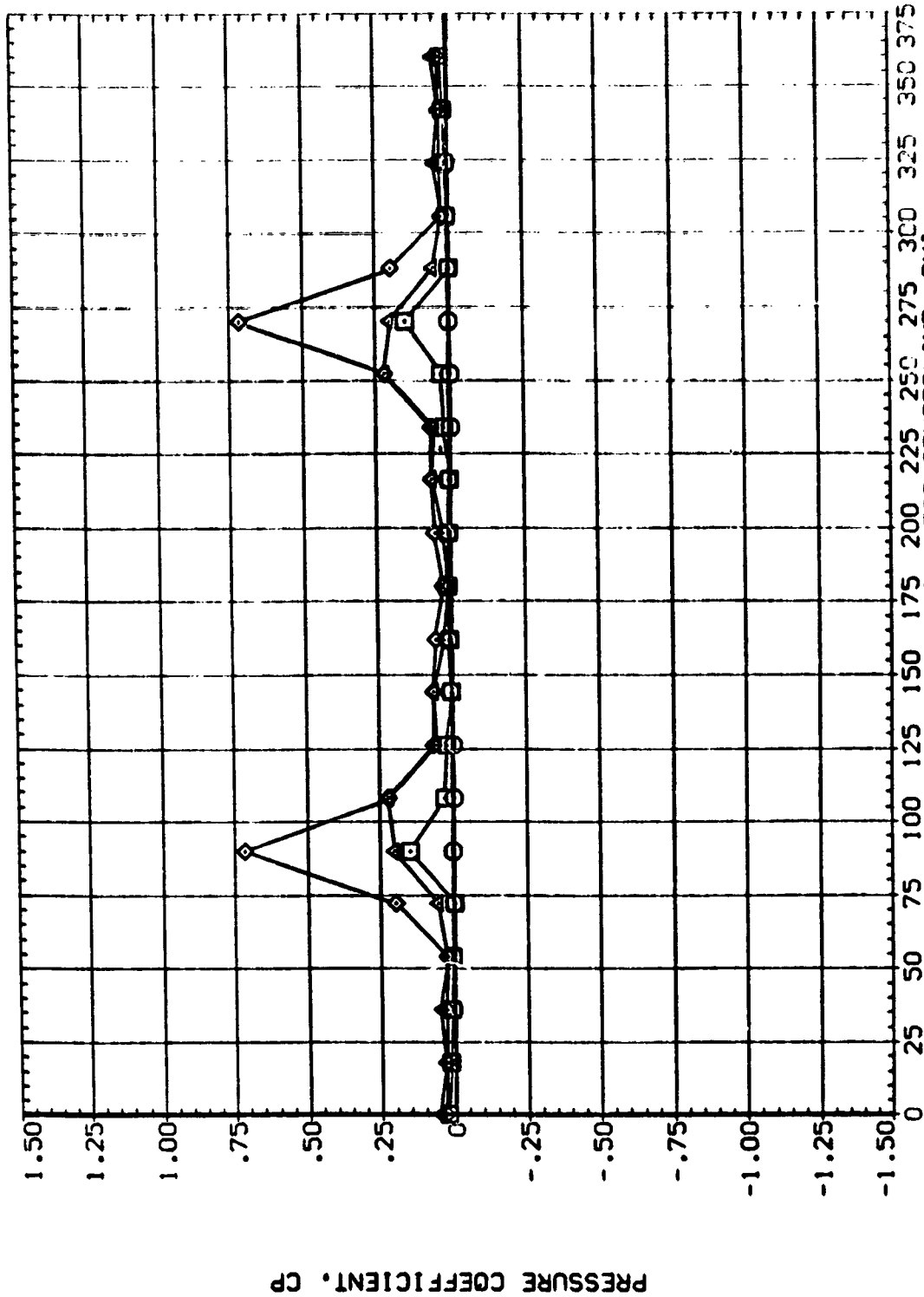
MACH  
 3.480

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

SO. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA Z  
 X-SRB

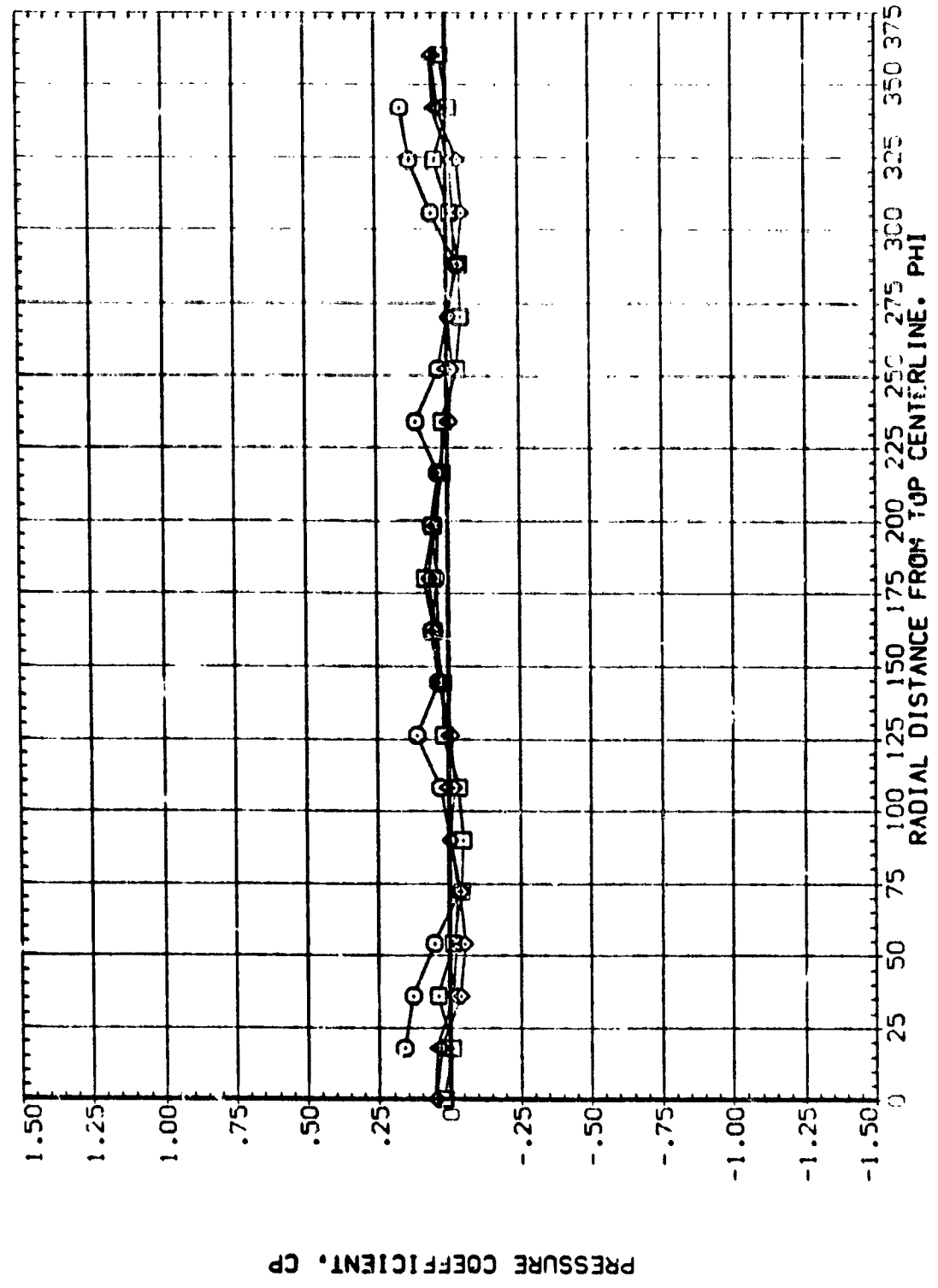
PARAMETRIC VALUES  
 5.000  
 .140  
 .000  
 50.000  
 .000  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

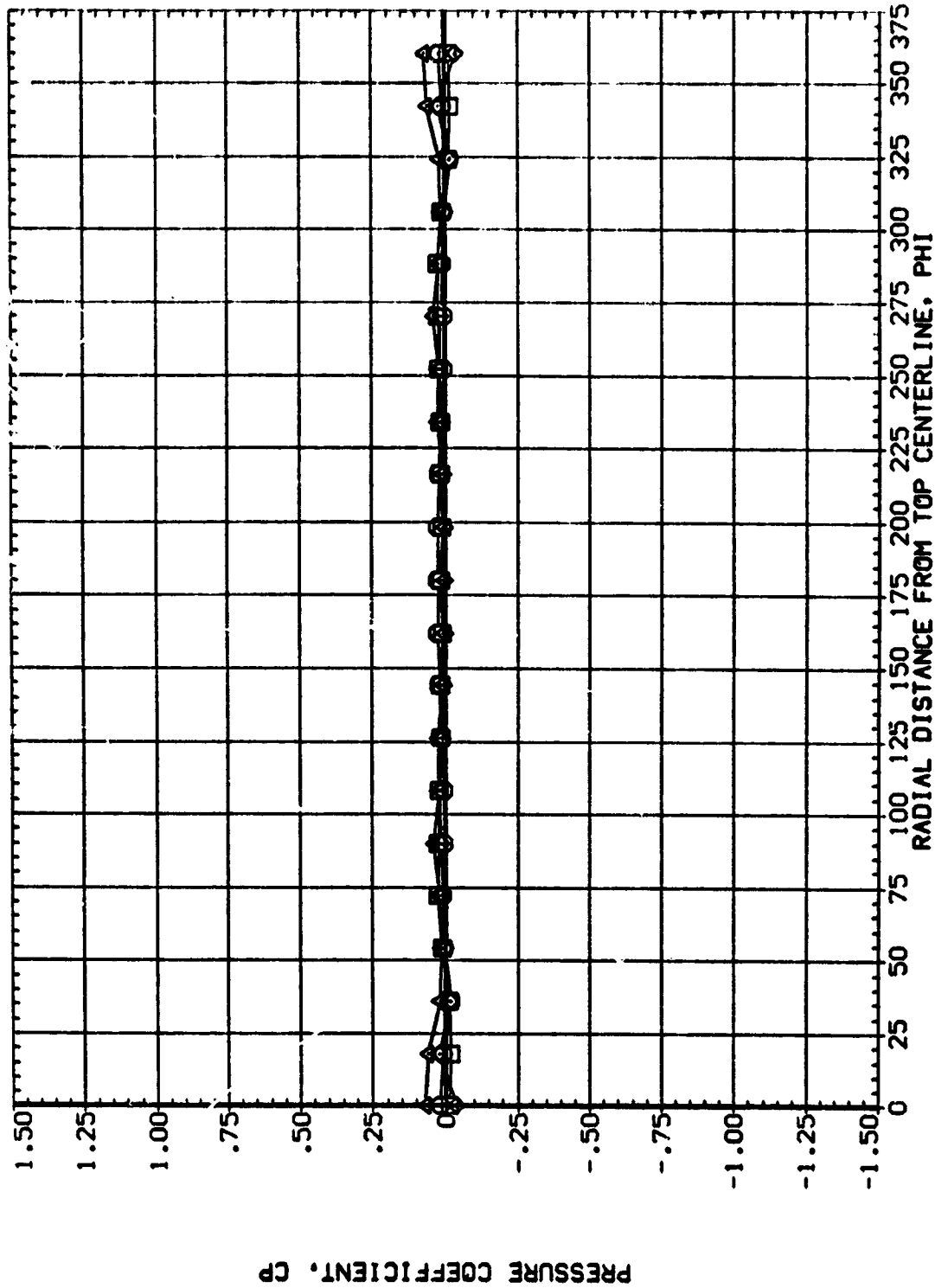
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	ALPHA	CONF 15
○	.438	.000	3.480	5.313	IN.	DELTA Z	50.000
□	.506			5.313	IN.	X-538	.000
◇	.573			2.549	IN.		.000
△	.641			.000	IN.		.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
◇	.708	.000	3.480	SREF 6.193	5.000 CONFIG 50.000
○	.776			LREF 5.313	.140 RUDDER .000
□	.844			BREF 5.313	.000 ORBINC .500
△	.912			MREF 2.549	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

**Symbol** **O**

W/LT	BETA	MAC-1
.994	.000	3.480

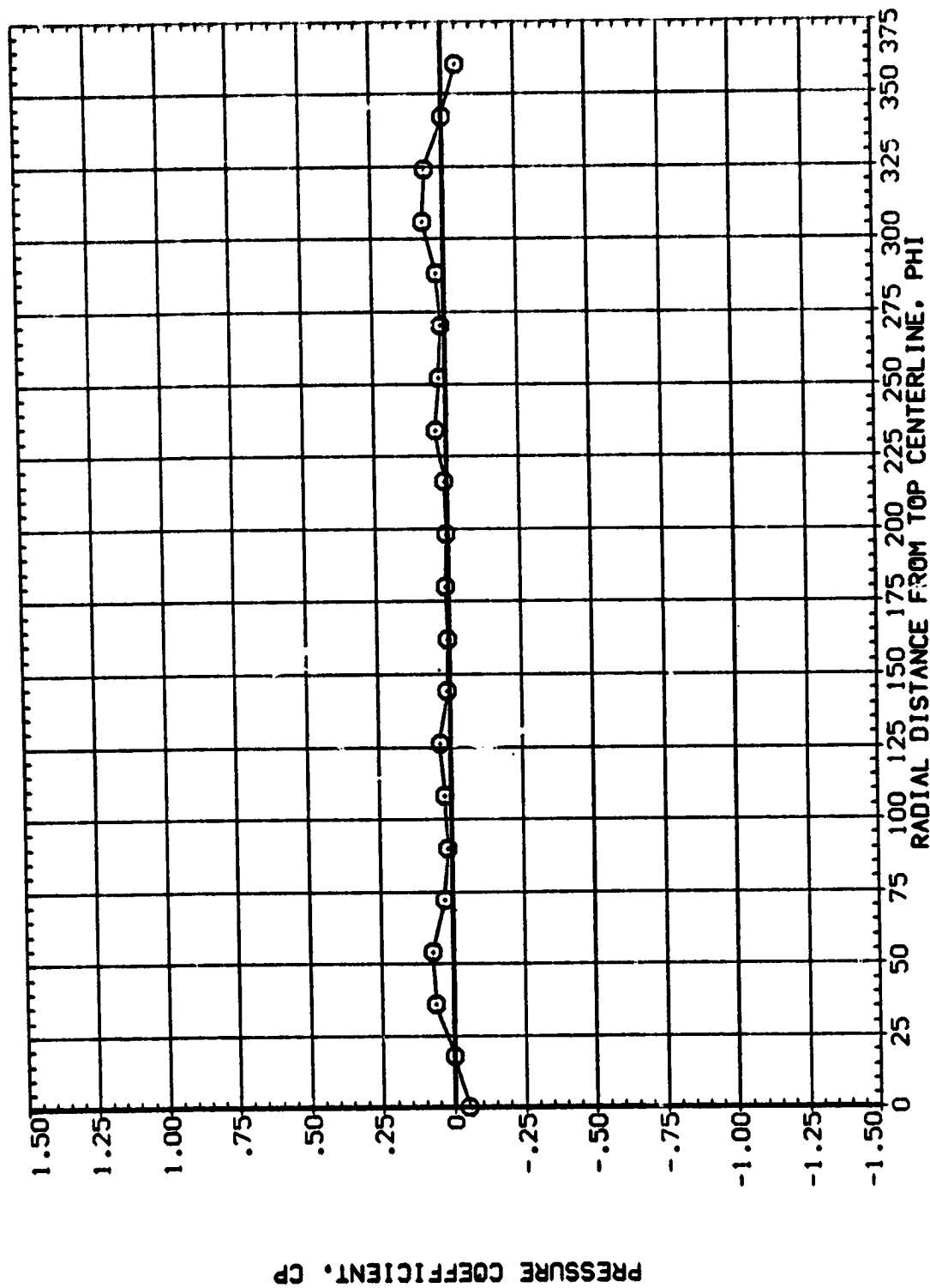
REF  
SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP

[illegible]

ALPHA  
DELTA Z  
X-SRB

### PARAMETRIC VALUES

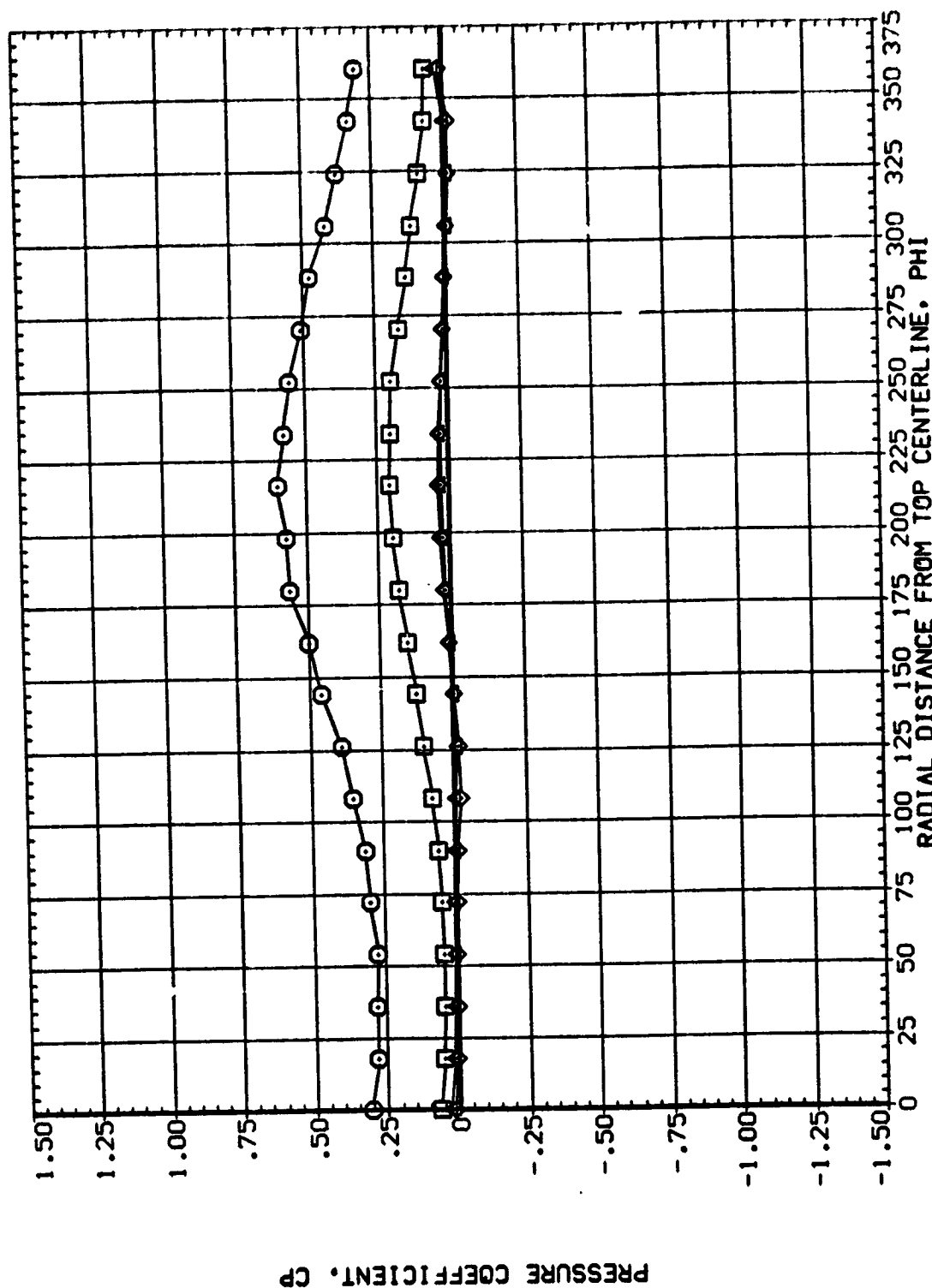
5.000	CONFIG	90.000
.140	RUDER	.000
.000	ORBITAL	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82103)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	5.000	CONF 16	90.000
○	.076	4.000	3.480	6.198	5.313	5.313	2.548	IN.	.140	RUDDER	.000
□	.155							IN.	.000	DRBINC	.500
◇	.220							IN.			
△	.235							IN.			

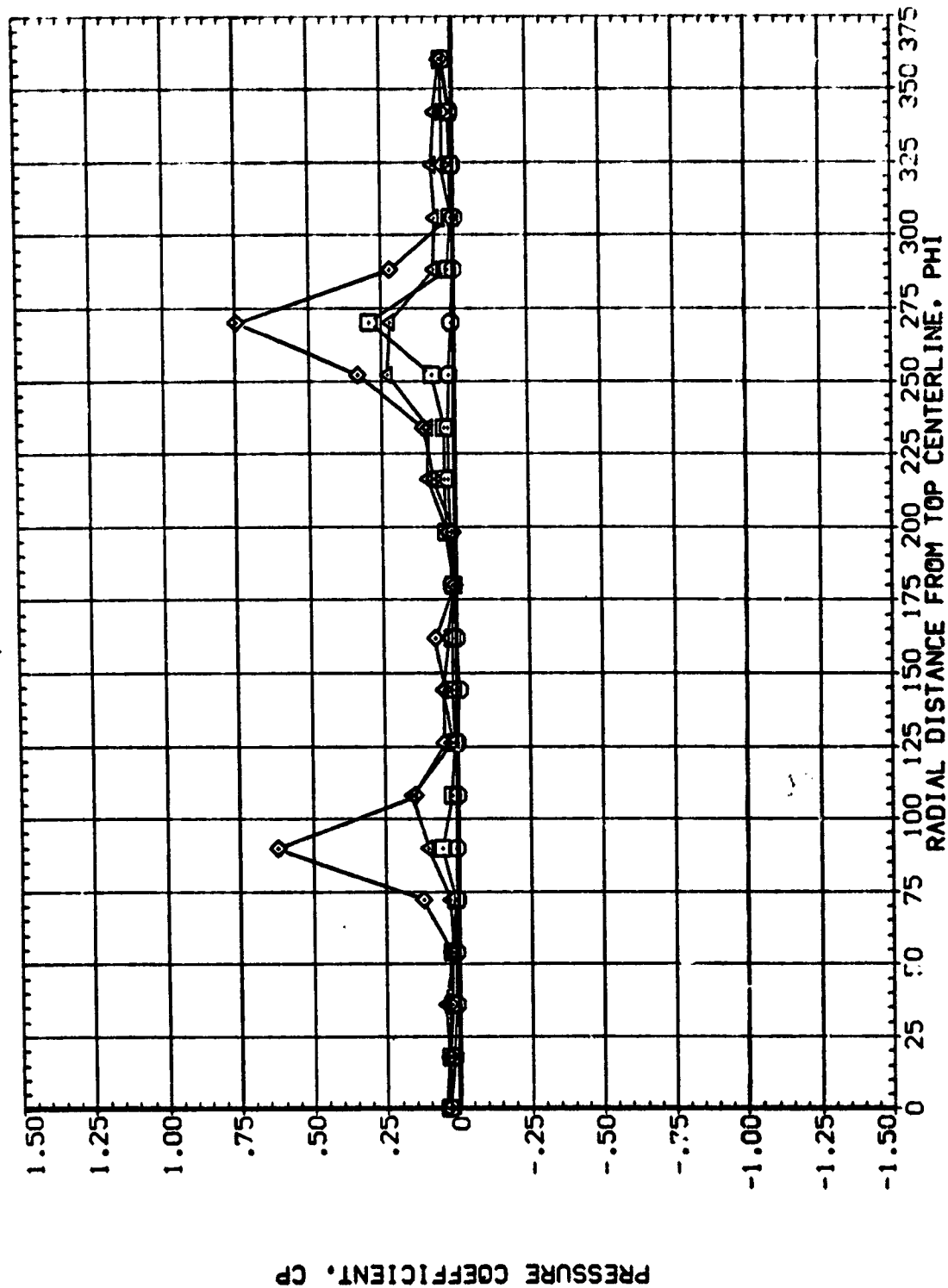


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SO. IN.	CONF IG	CONF IG	
○	.271	4.000	3.480	LREF	IN.	DELTA Z	RUDDER	.000
□	.314			BREF	IN.	X-SRB	.000	.000
◇	.350			YPRP	IN.		ORBITAL	.500
△	.382			ZPRP	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

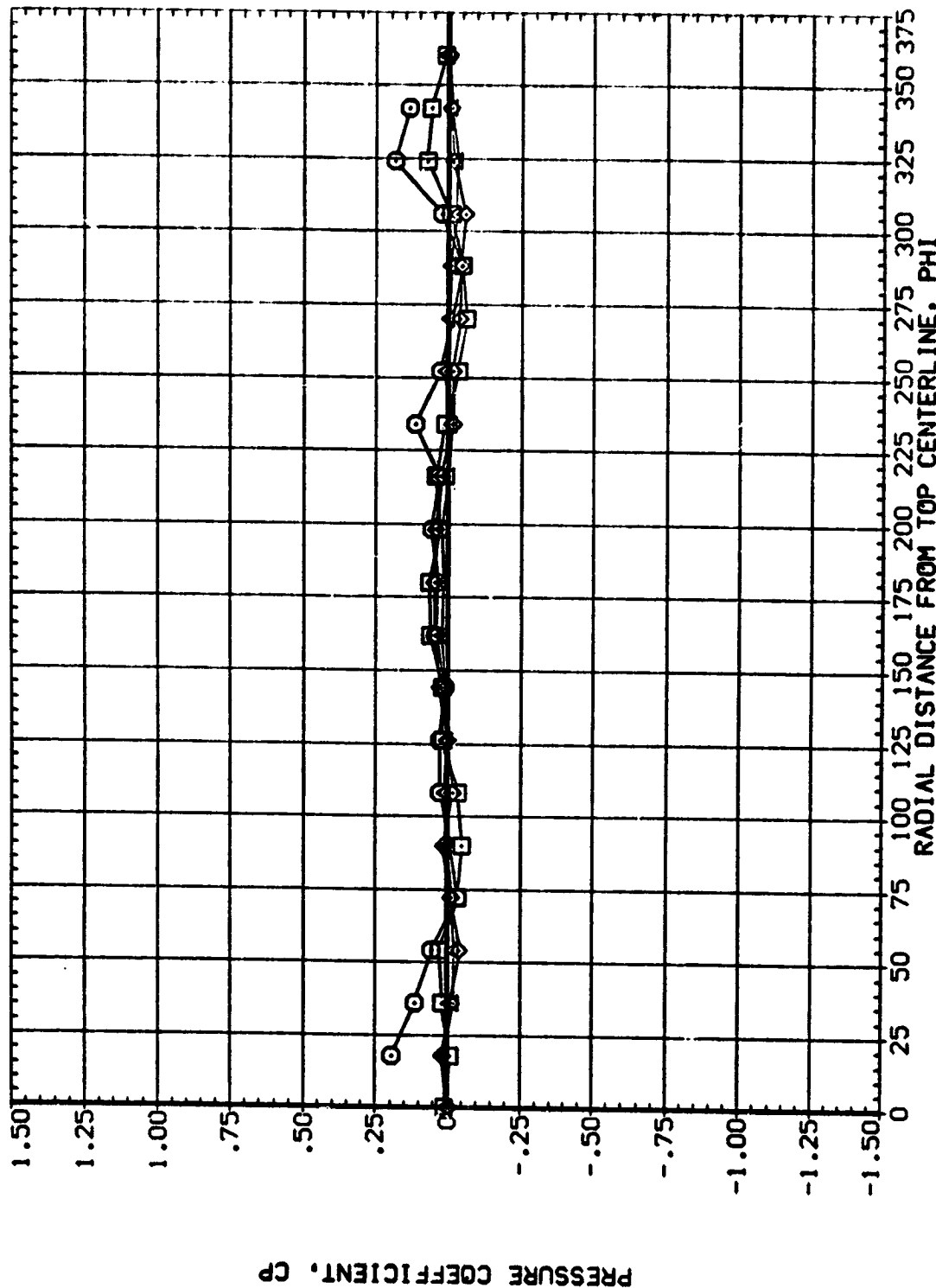
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL  
 ○  
 □  
 △

X/LT    BETA    MACH  
 .438    4.000    3.480  
 .506  
 .573  
 .641

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

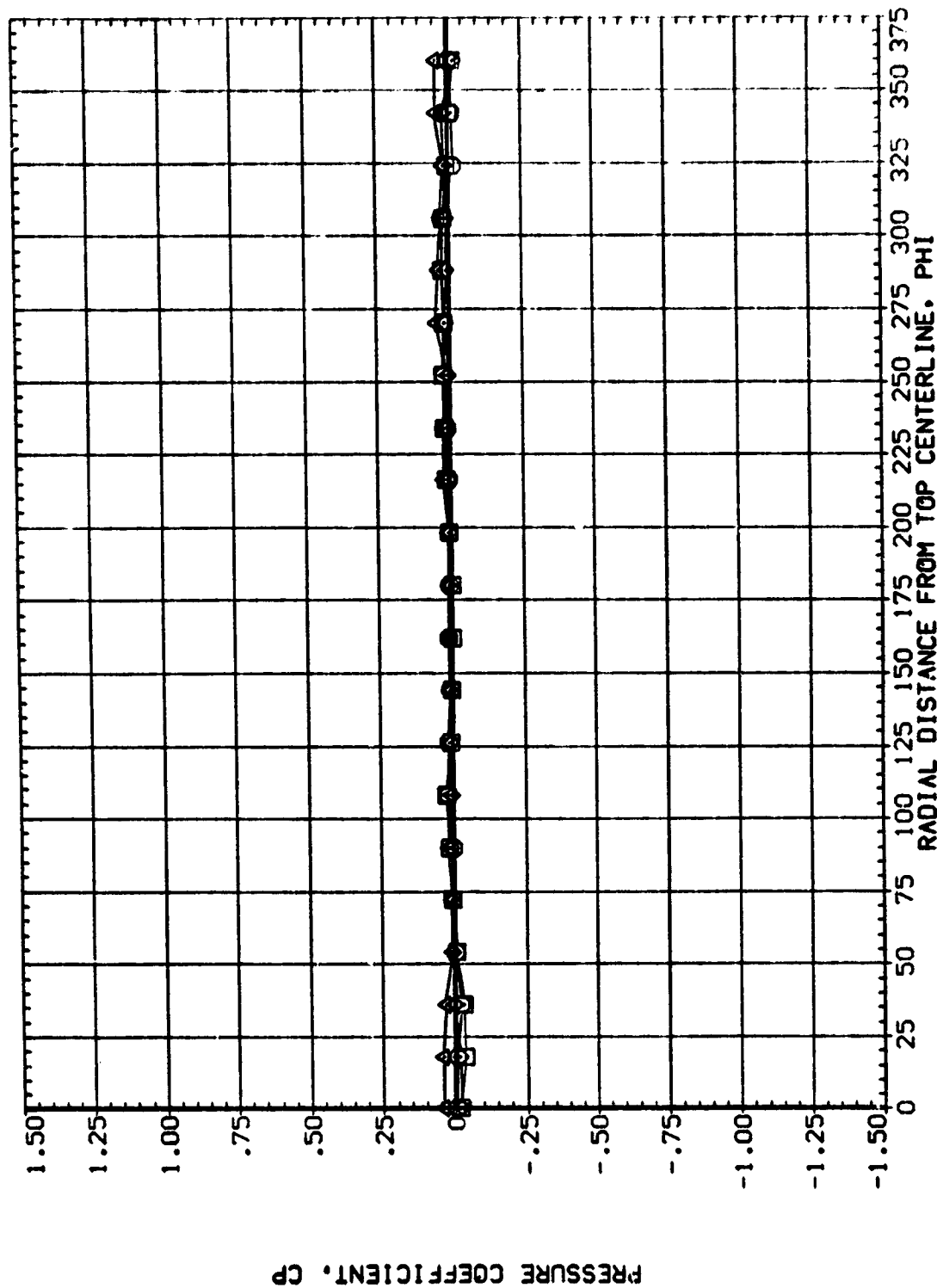
PARAMETRIC VALUES  
 5.000    50.000  
 .140    RUDDER  
 .000    ORBINC  
 X-SRB



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03      EXTERNAL TANK (A82103)

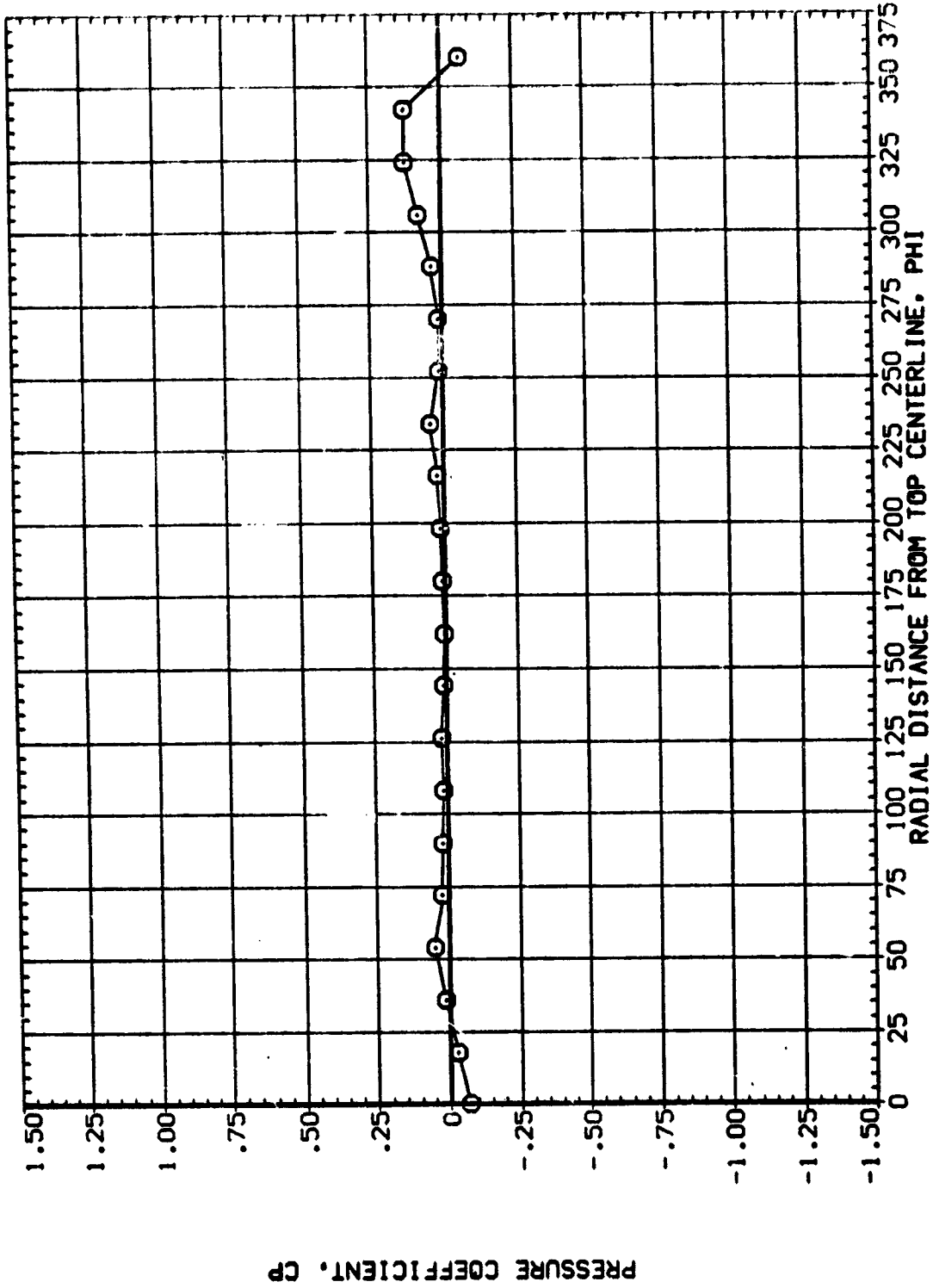
SYMBOL	X/LT		BETA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	0	1	2	3	4	5	6	7	8	9
□	.708		4.000		3.480		SREF	6.198	5.000	CONF IG
◇	.776						LREF	5.313	.140	RUDER
△	.844						BREF	5.313	.000	ORB INC
	.912						YMRP	2.549		
							ZMRP	.000		
										50.000
										.000
										.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T03)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	CONF IG	
O	.584	4.000	3.480	5.198	5.313	5.313	2.549	IN.	DELTA Z	RUDER	90.000
				.000	.000	.000	.000	IN.	X-SRB	ORBIT INC	.000
				.000	.000	.000	.000	IN.			.500

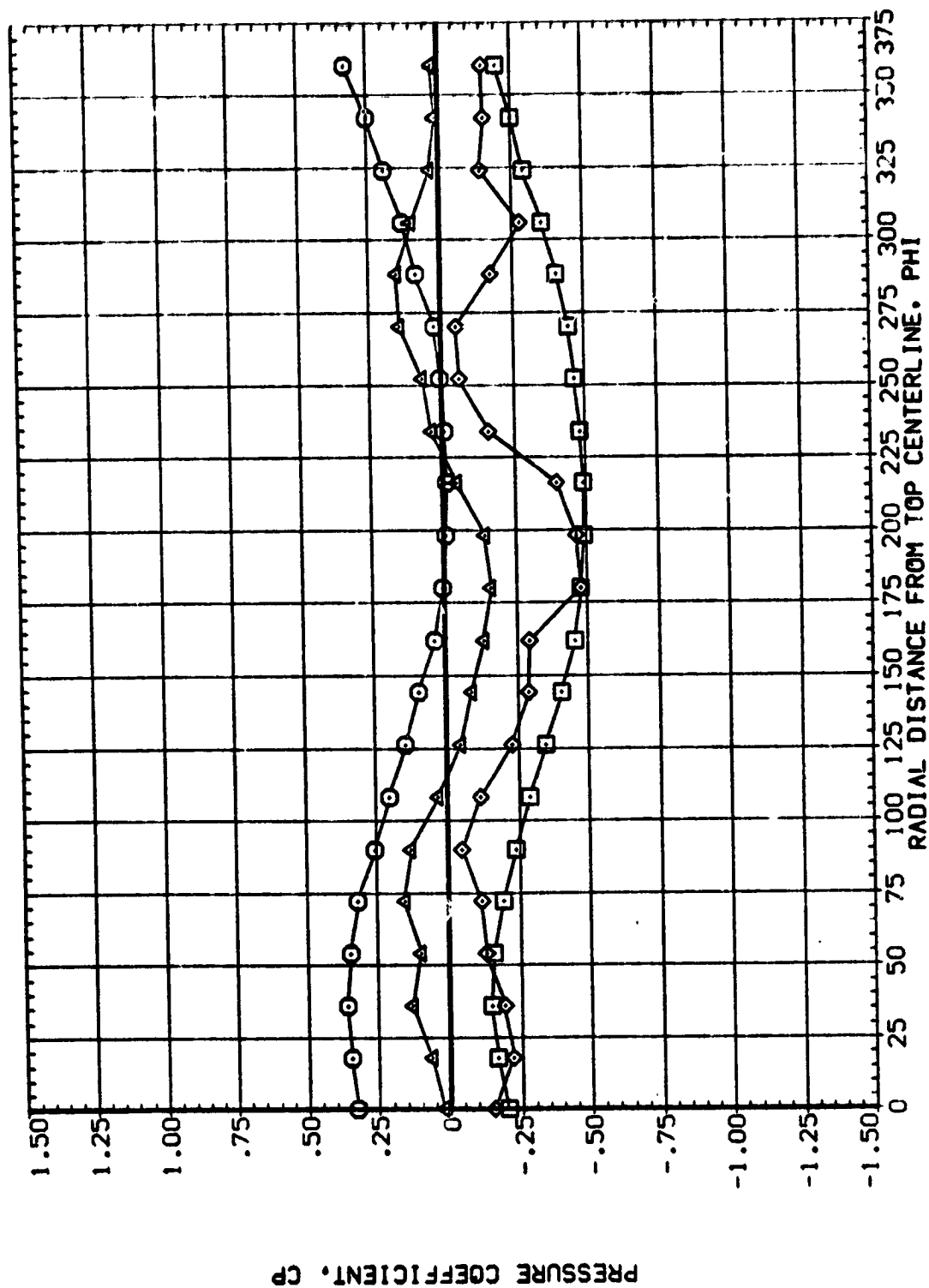


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

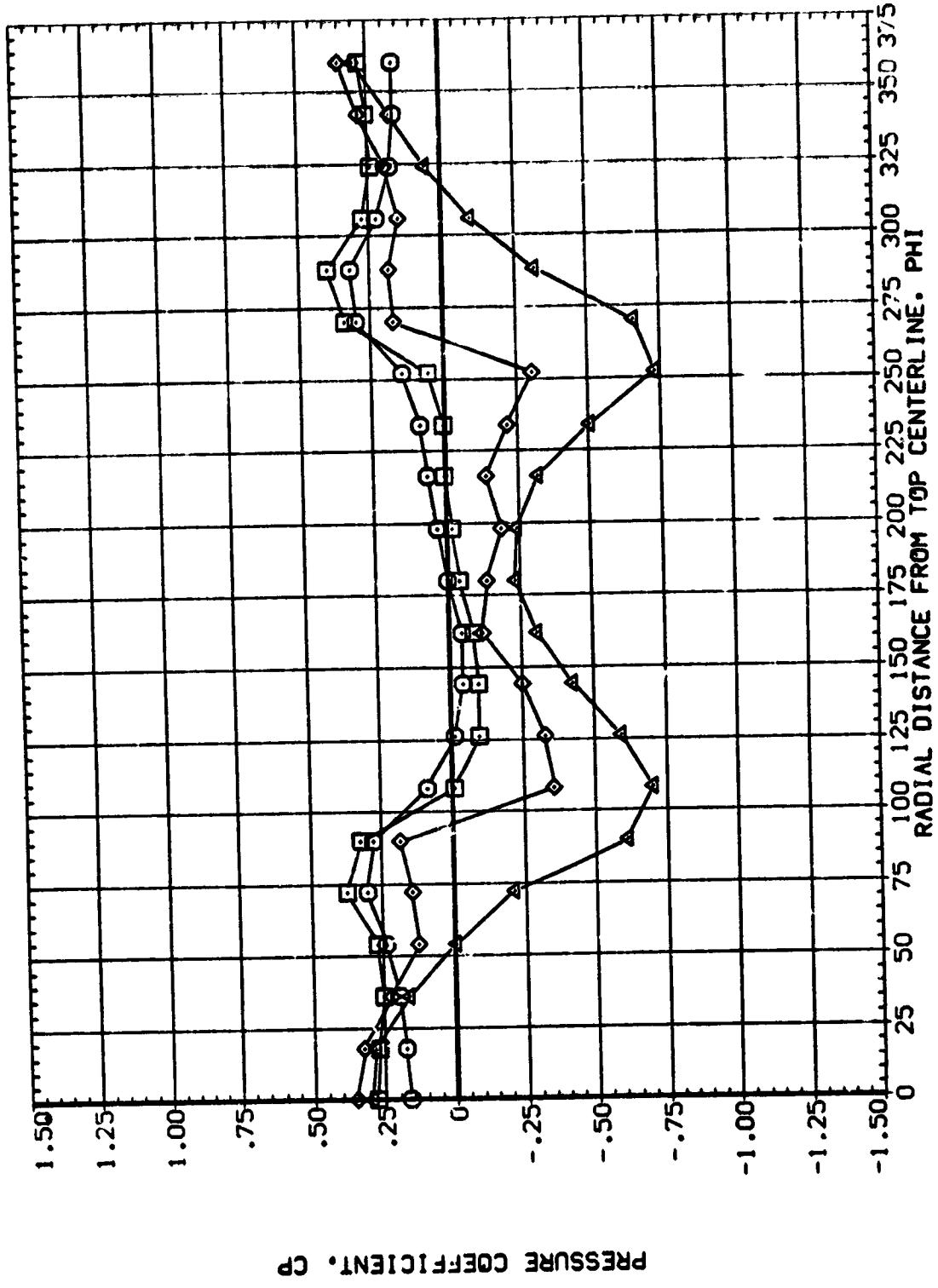
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SD. IN.	ALPHA	CONF IG	90.000
○	.076	-4.000	.900	LREF	IN.	DELTA Z	RUDDER	.000
□	.195			BREF	IN.	X-SRB	ORBIT INC	.500
◇	.220			XPRP	IN.			
△	.235			YPRP	IN.			
				ZPRP	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA		MACH	REFERENCE DATA					PARAMETRIC VALUES			
		.271	-4.000		SREF	6.198	50. IN.	ALPHA	-5.000	CONFIG	50.000		
○				.900	LREF	5.313	IN.	DELTA Z	.140 <td>RUDDER</td> <td>.000</td>	RUDDER	.000		
□		.314			BREF	5.313	IN.	X-SRB	.000 <td>ORGINC</td> <td>.500</td>	ORGINC	.500		
◇		.350			XMRP	2.549	IN.						
△		.382			ZMRP	.000	IN.						

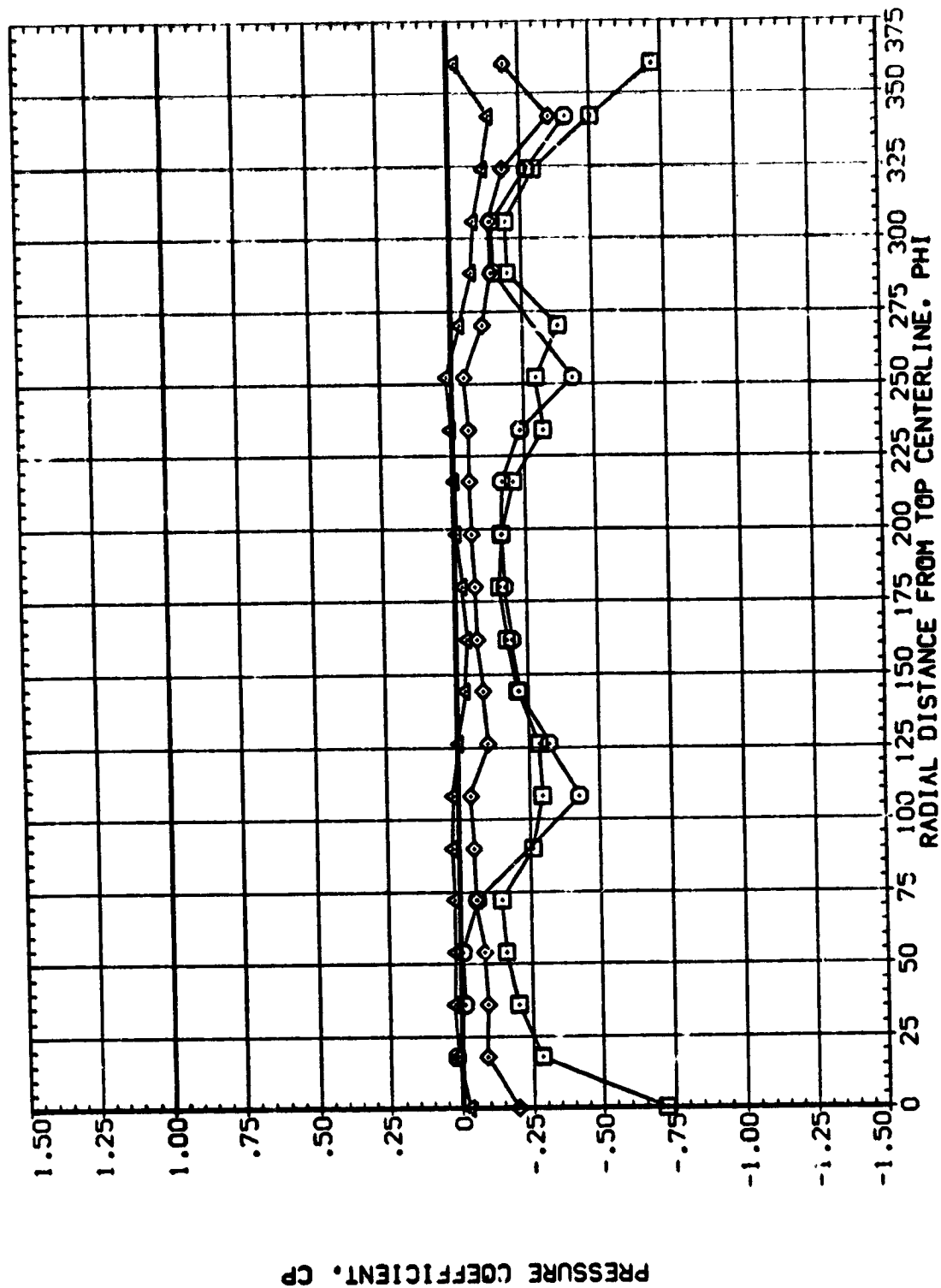


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

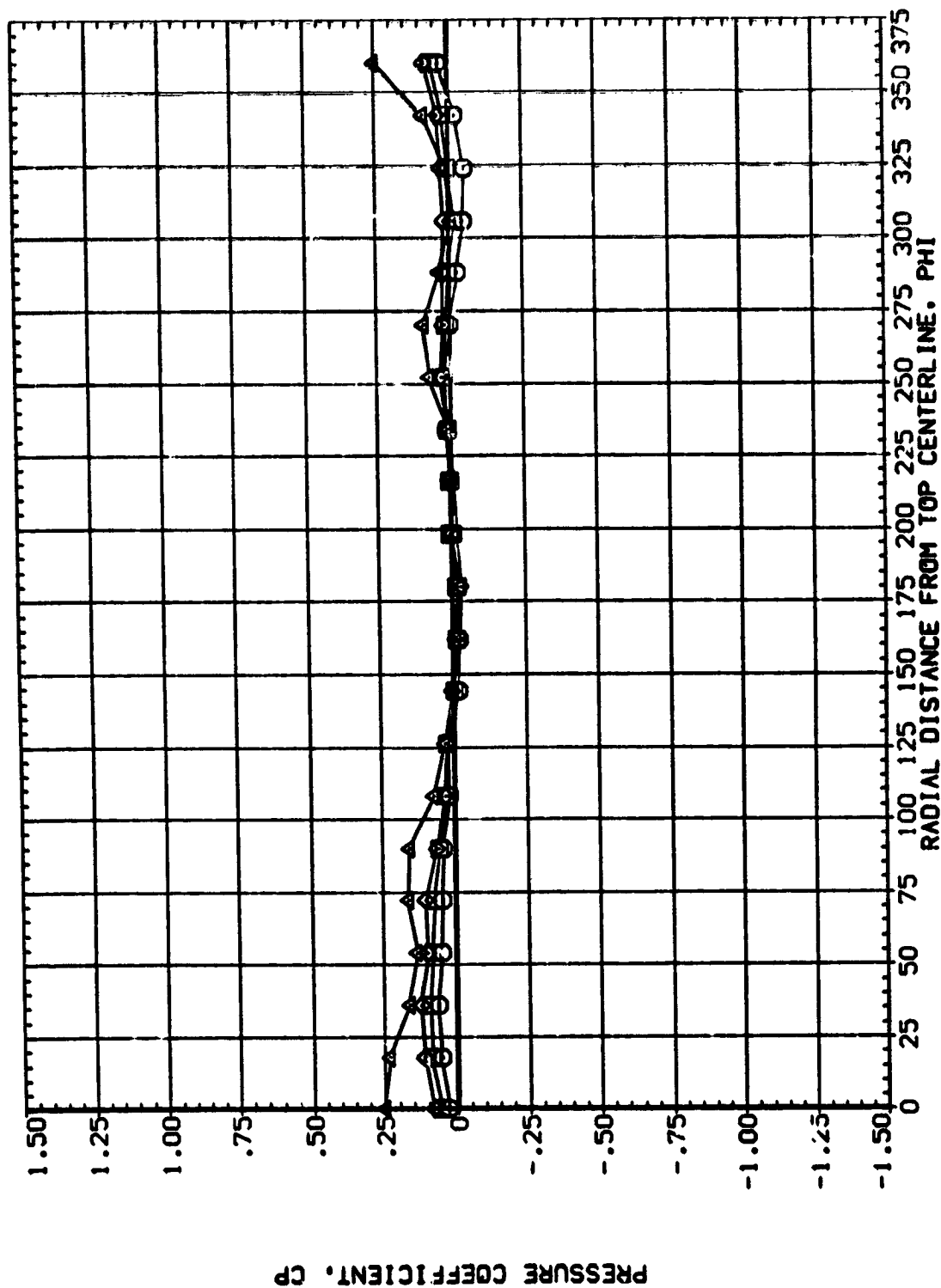
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONFIS	PLUDDER	ORBITINC
△	.438	-4.000	.500	6.198	5.313	5.313	2.549	DELTAZ	.000	.140	.000
□	.506							X-SRB			.500
◇	.573										
▽	.641										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL	X/LT			BETA			MACH			REFERENC DATA			PARAMETRIC VALUES		
	◇	◇	◇	.708	-4.000	.900				SREF	6.198	50. IN.	ALPHA	-5.000	CONF IG
	◇	◇	◇	.776						LREF	5.313	IN.	DELTA Z	.140	RUDER
	◇	◇	◇	.844						BREF	5.313	IN.	X-SRB	.000	ORBIT INC
				.912						YMRP	2.549	IN.			
										ZMRP	.000	IN.			

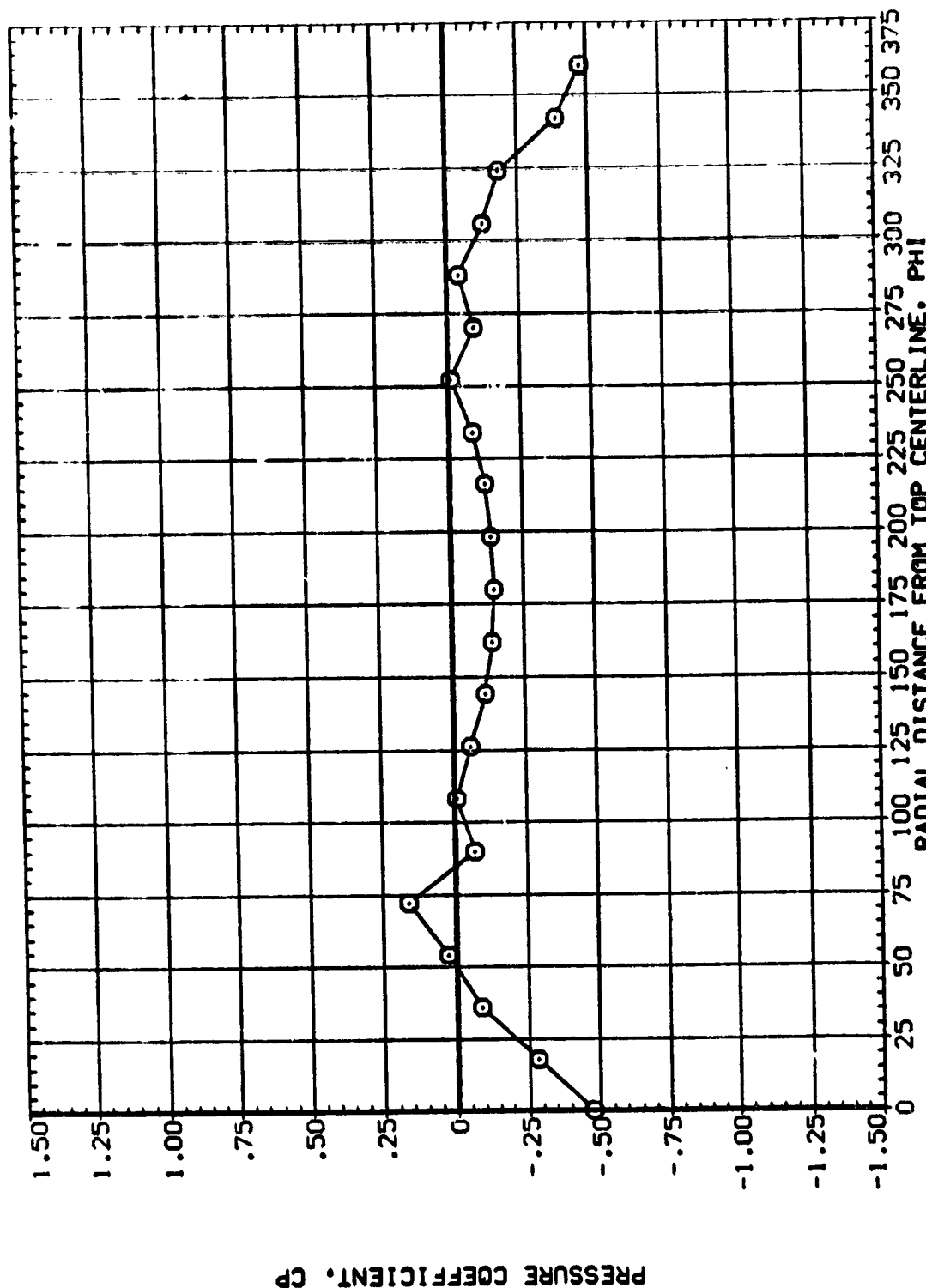


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	-5.000	CONFIS	50.000	
0	.584	-4.000	.900	6.198	5.313	5.313	2.549	.140	BLDER	.000	.000
				YREF	ZREF			.000	DBINC		.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

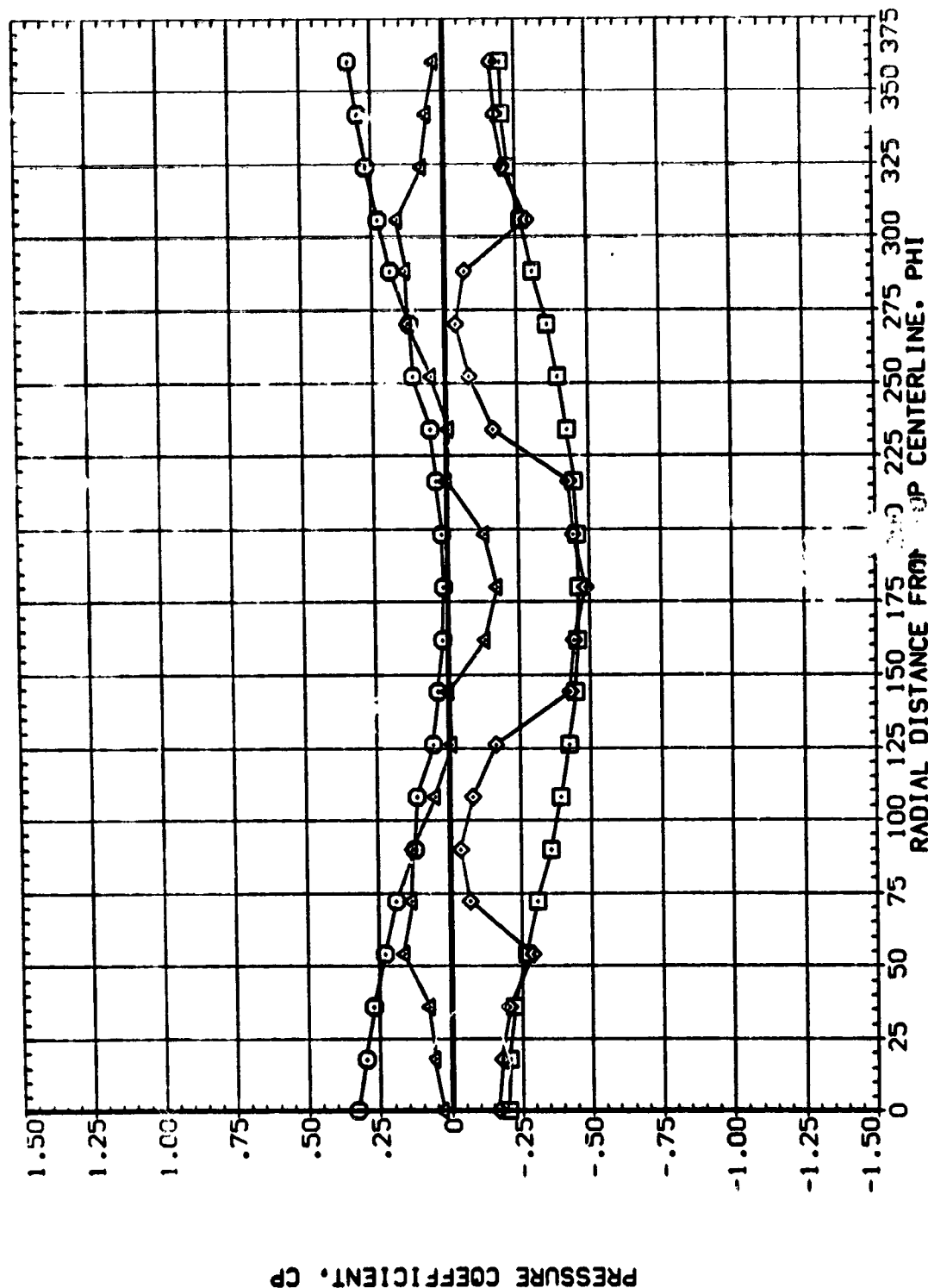
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
○ □ ◇ △

X/LT .076  
.155  
.220  
.235  
BETA .000  
MACH .900

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

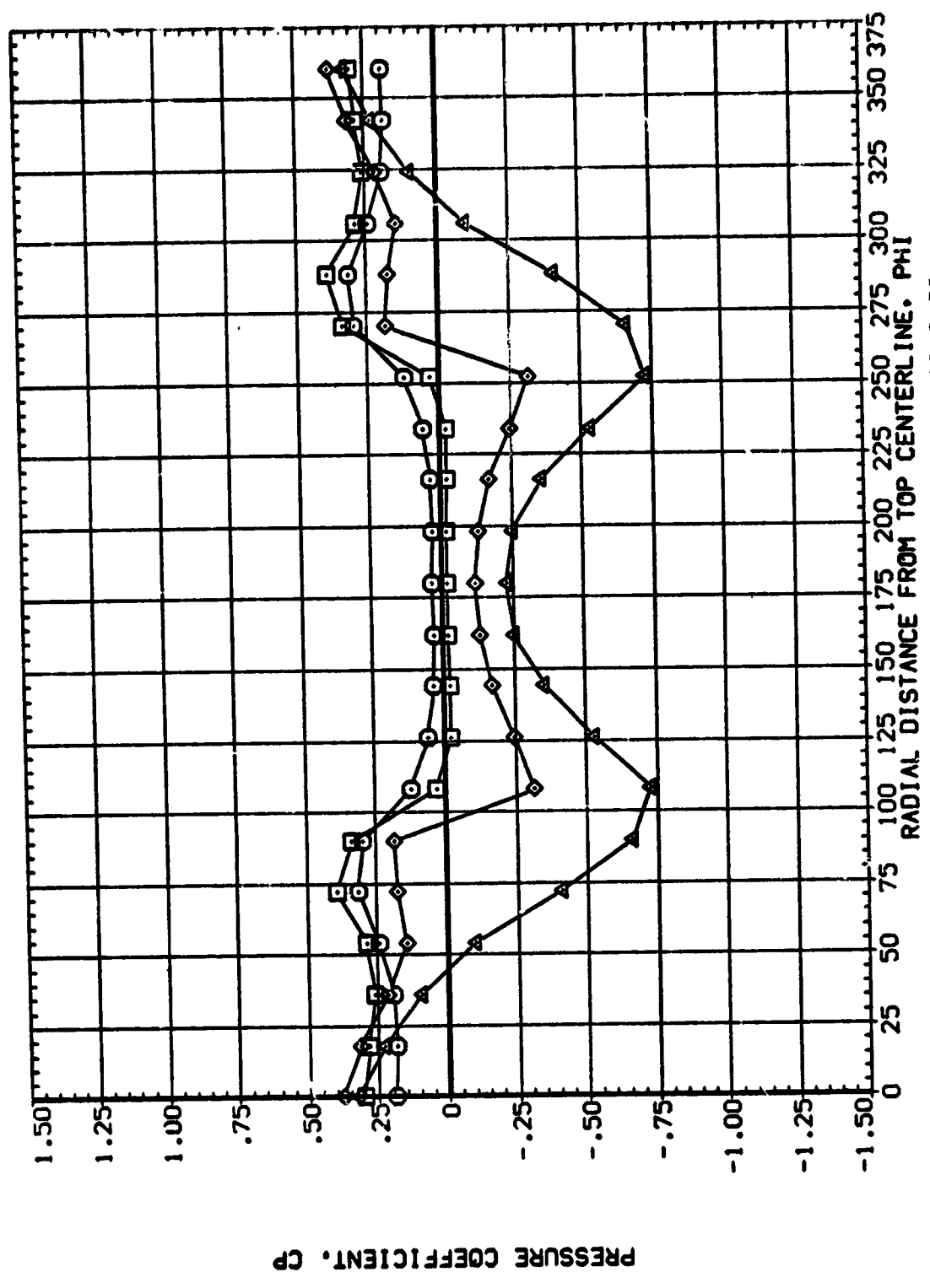
PARAMETRIC VALUES  
-5.000  
.140  
.000  
CONF IG  
RUDDER  
DRG INC  
90.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

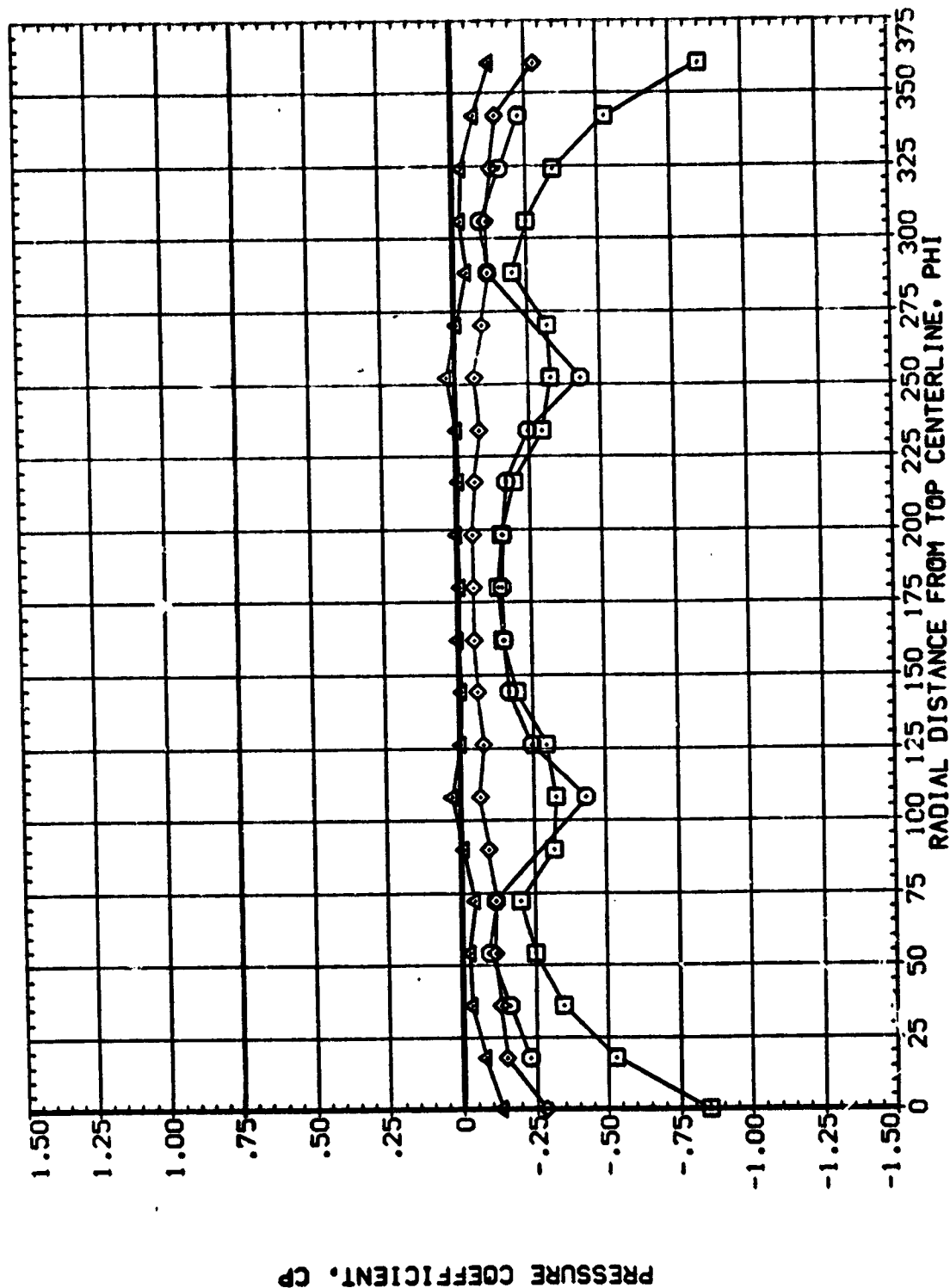
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONF16	CONF16	CONF16
◇	.271	.000	.900	5.198	5.313	5.313	2.549	DELTAZ	.140	RUDER	.000
□	.314	.000	.900	5.313	5.313	5.313	2.549	X-SRB	.000	DRBINC	.500
◇	.350	.000	.900	5.313	5.313	5.313	2.549				
◇	.382	.000	.900	5.313	5.313	5.313	2.549				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA			PARAMETRIC VALUES			
○	.438	.000	.900	SREF	6.198	50. IN.	ALPHA	-5.000	CONFIG	90.000
□	.506			LREF	5.313	IN.	DELTA Z	.140	RUDDER	.000
◇	.573			BREF	5.313	IN.	X-SRB	.000	ORBNIC	.500
△	.641			XMRP	2.549	IN.				
				YMRP	.000	IN.				
				ZMRP	.000	IN.				

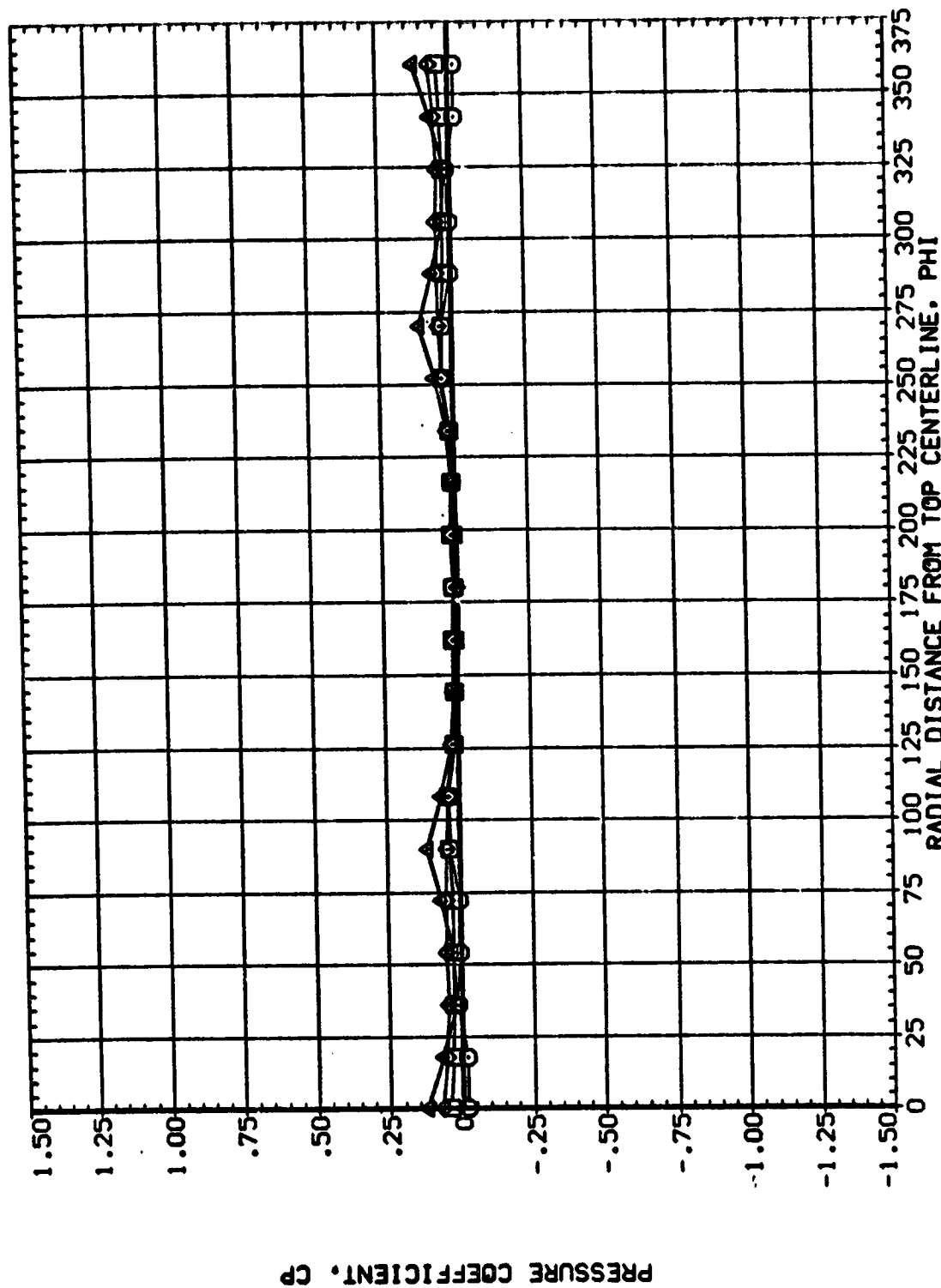


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MCH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	SD. IN.	ALPHA	CONF IG	RODER	90.000
□	.708	.000	.900	LREF	5.313	DELTA Z	.000	.140	.000
◇	.776			BREF	5.313	X-SRB	.000	.000	.500
△	.844			XPRP	2.549				
	.912			YPRP	.000				
				ZPRP	.000				



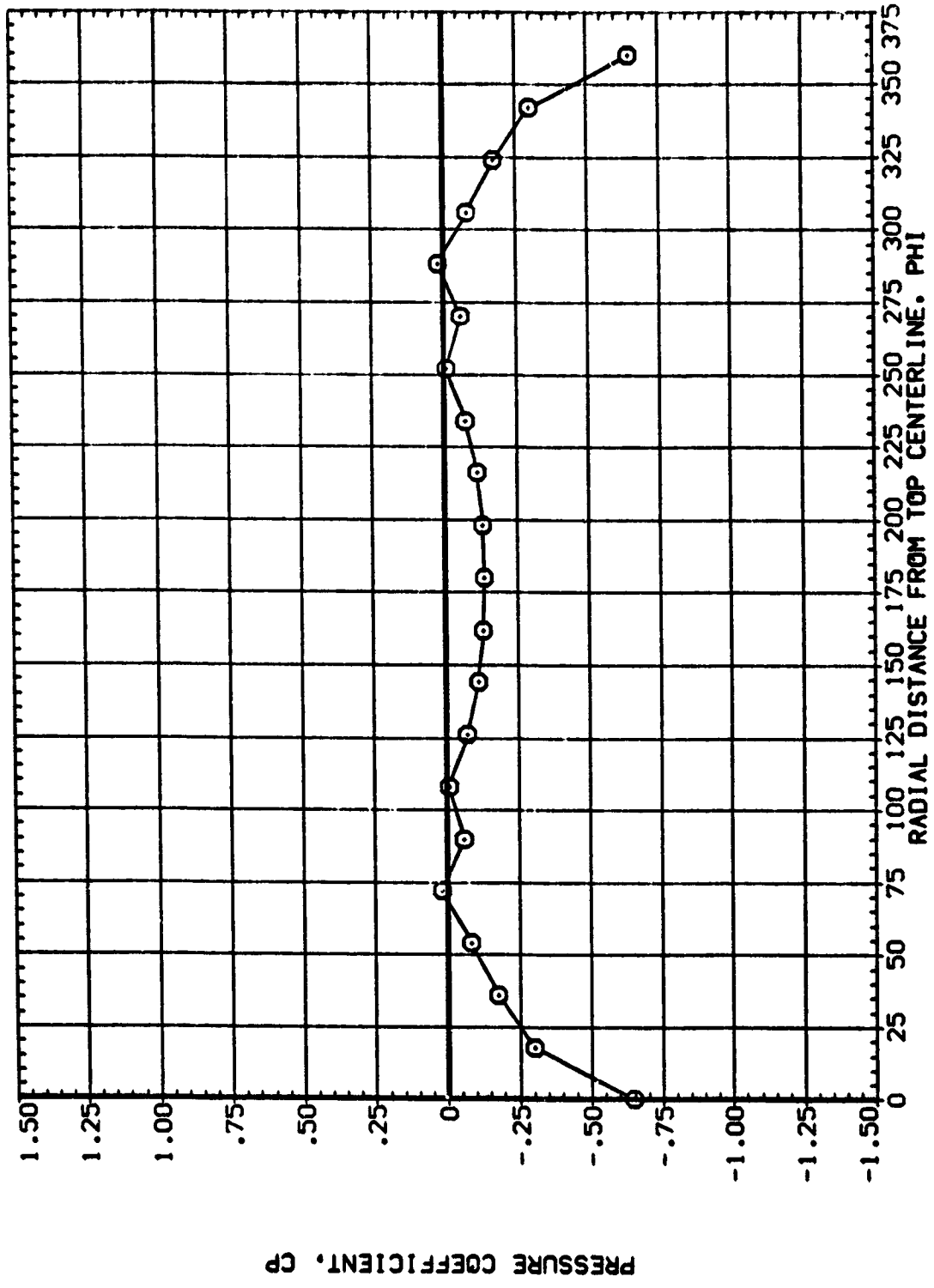
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

SYMBOL  
O

X/LT .984 BETA .000 MACH .900

REFERENCE DATA  
SREF 6.198 50. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XPRP 2.549 IN.  
YPRP .000 IN.  
ZPRP .000 IN.

PARAMETRIC VALUES  
-5.000 CONF IG 90.000  
.140 RUDDER .000  
.000 ORBINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

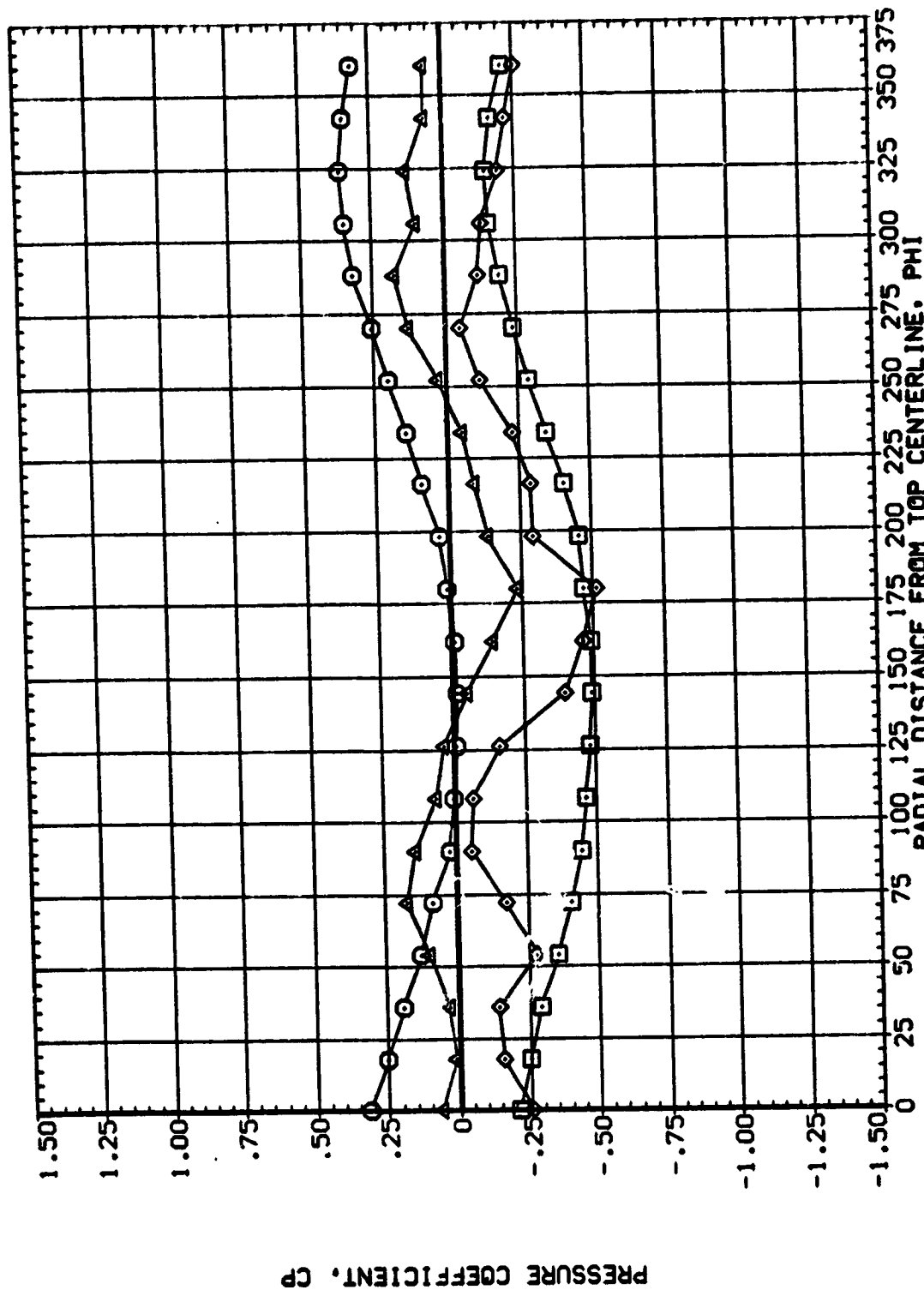
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○ □ ◇ △

X/ALT BETA MACH  
 .076 4.000 .900  
 .155  
 .220  
 .235

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XPRP 2.549 IN.  
 YPRP .000 IN.  
 ZPRP .000 IN.

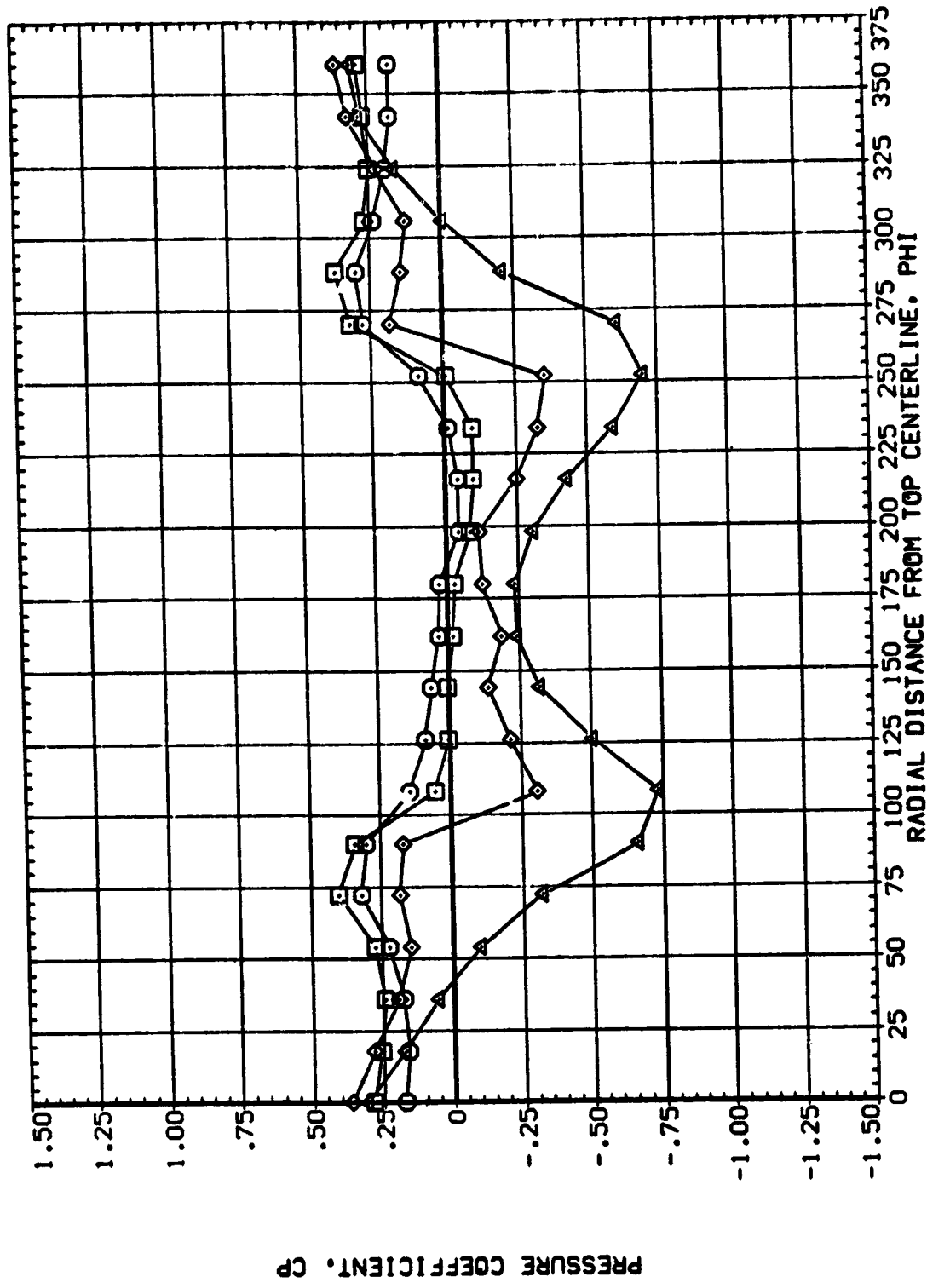
PARAMETRIC VALUES  
 -5.000 CONF IG 50.000  
 .140 RUDDER .000  
 .000 ORB INC .500  
 ALPHA DELTA Z  
 X-SRB



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	AI PMA	CONF IG	RUDER	ORB INC
○	.271	4.000	.900	6.198	5.313	5.313	2.549	DELTA Z	-5.000	.140	.000
□	.314							X-SRB	.000	.000	.500
◇	.360										
△	.382										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
□  
◇  
△

X/LT .438  
.506  
.573  
.641

BETA 4.000

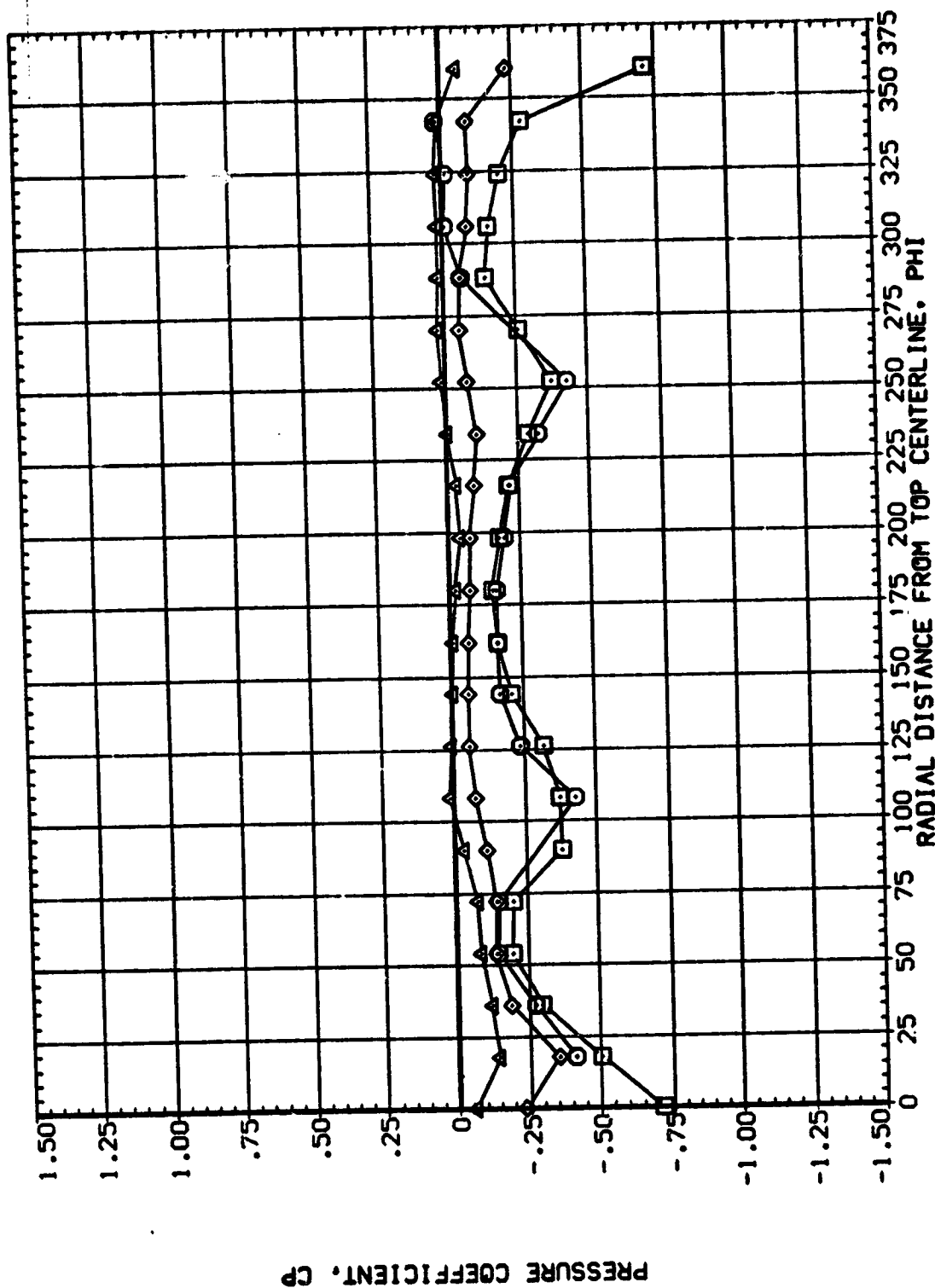
MACH .900

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP .000  
ZPRP .000

SD. IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

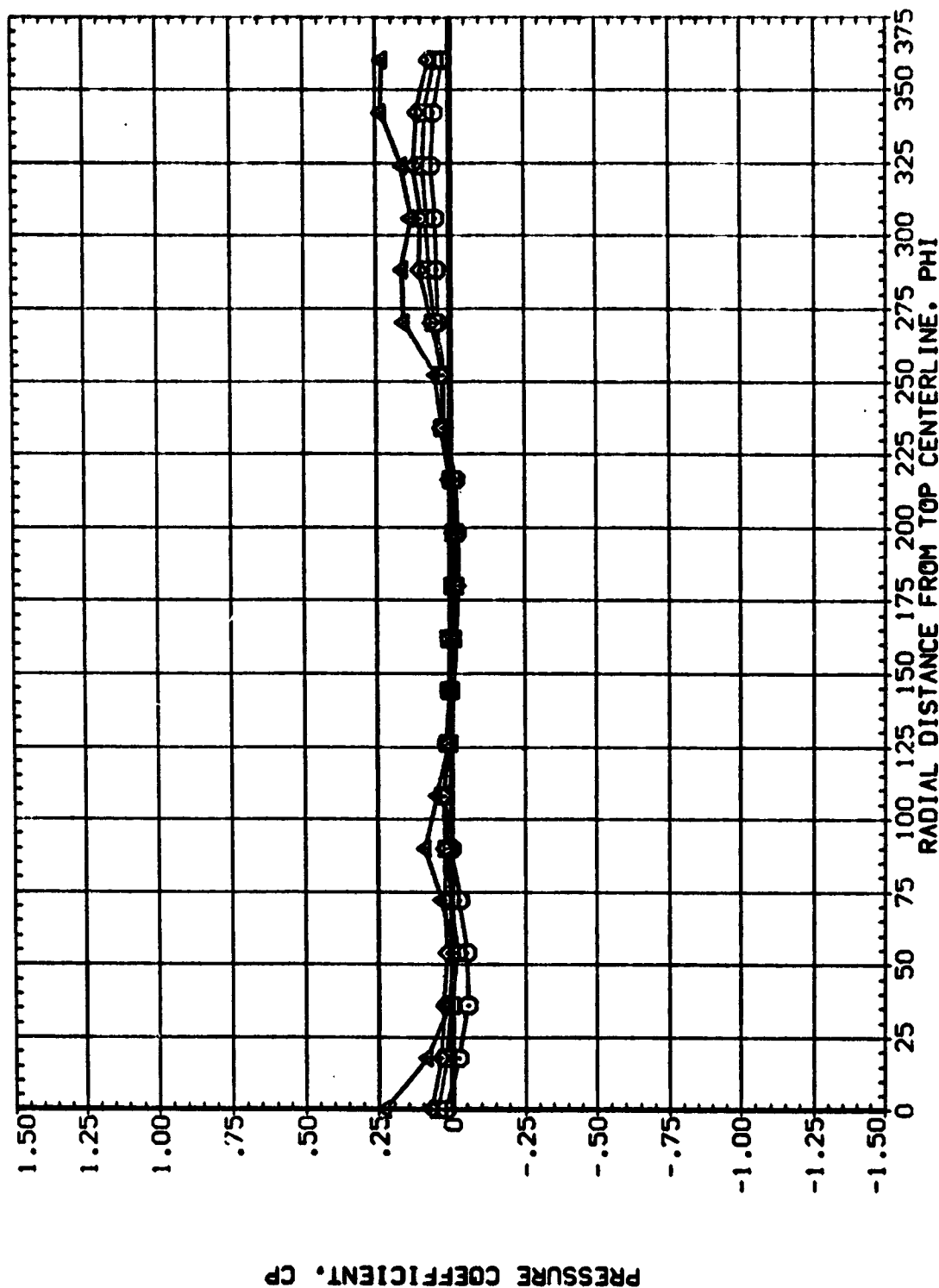
PARAMETRIC VALUES  
-5.000 COF IG 90.000  
.140 RUDDER .000  
.000 ORB INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
◇	.708	4.000	.900	SREF	6.198	ALPHA	-5.000
□	.776			LREF	5.313	DELTA Z	.140
◇	.844			BREF	5.313	X-SRB	.000
△	.912			YMRP	2.549		.000
				ZMRP	.000		.000
							.500

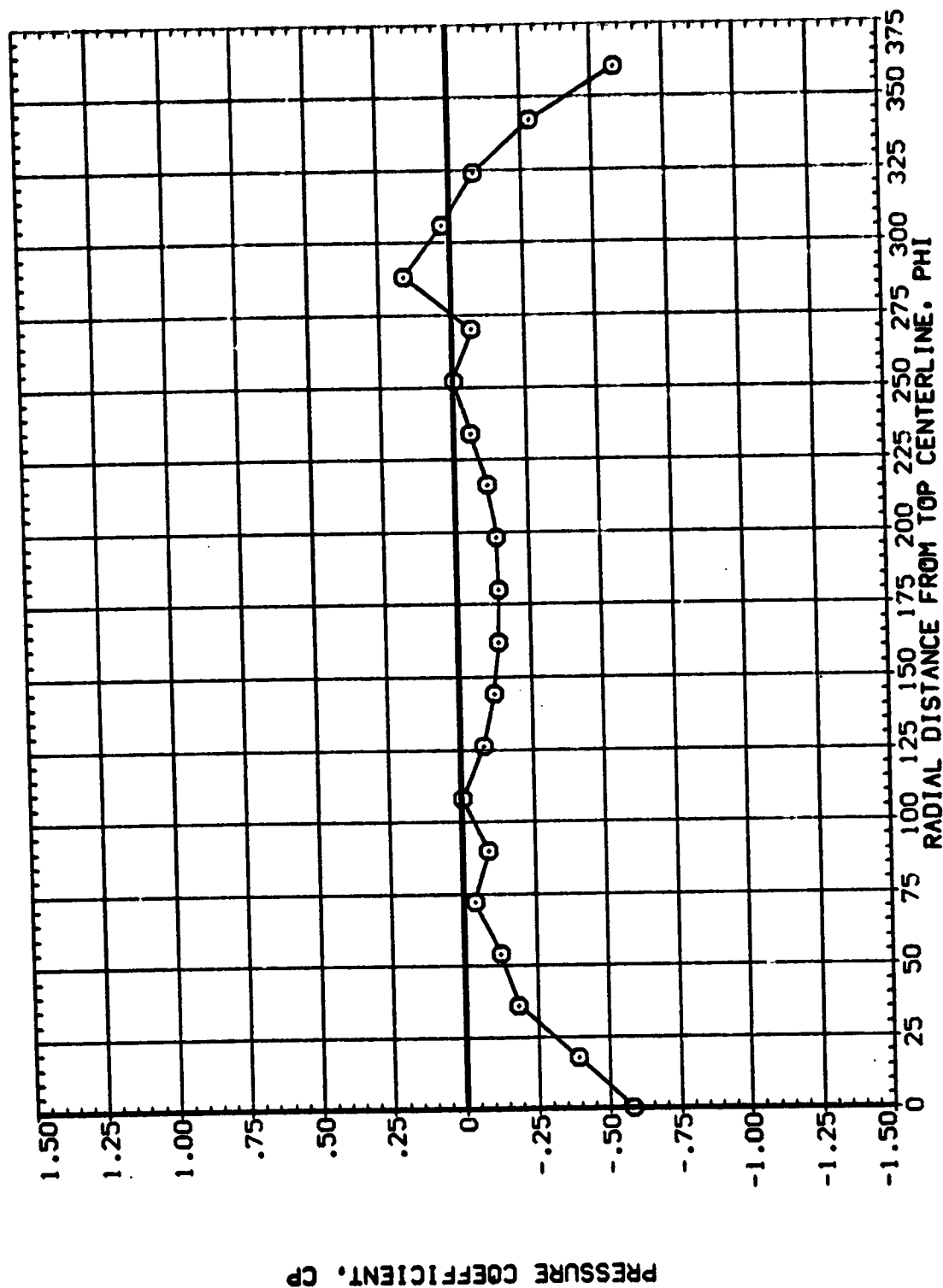


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

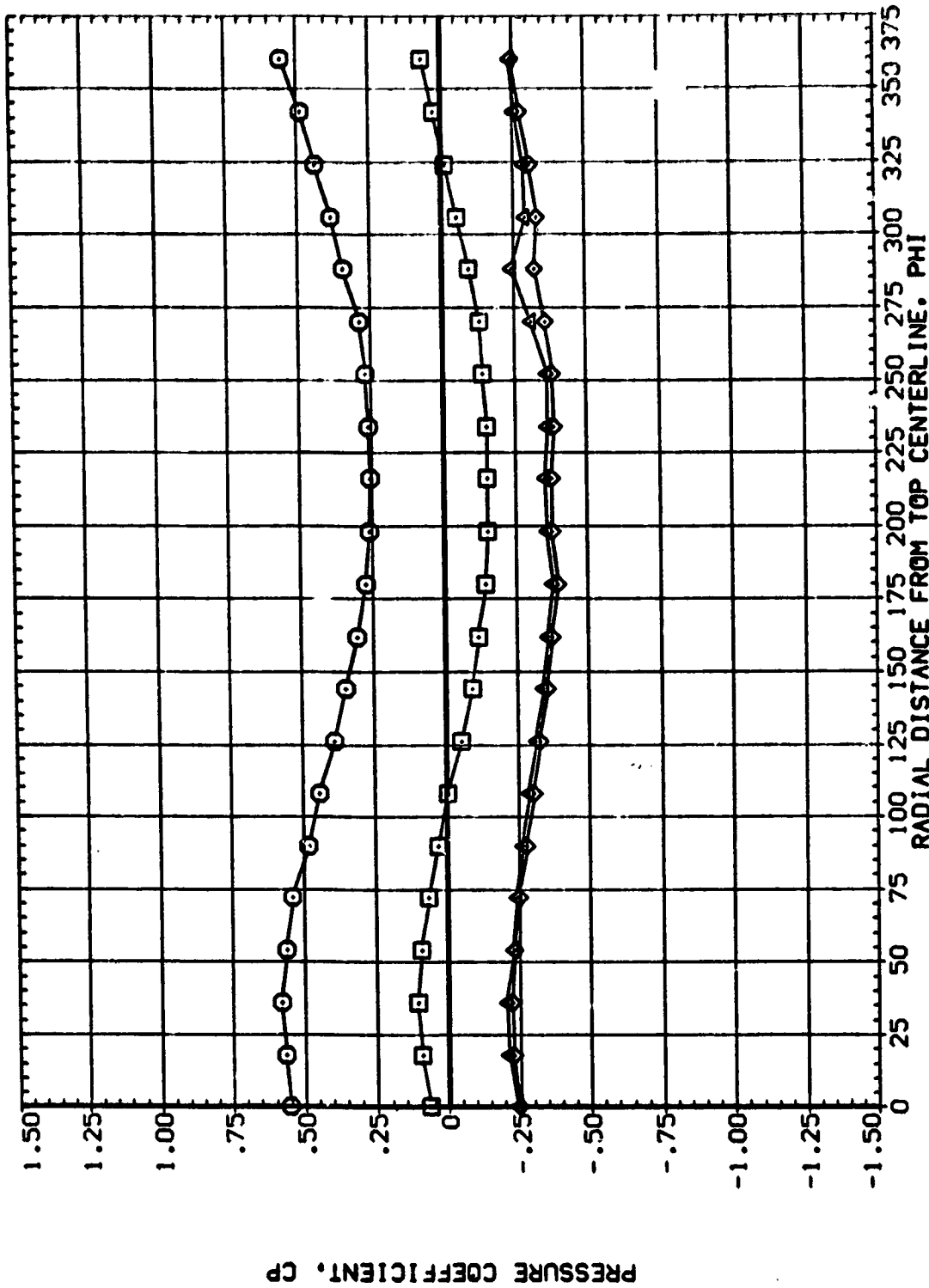
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	XREF	ZREF	ALPHA	CONFIG	RUDDER	ORIGIN
○	.984	4.000	.900	6.198	5.313	5.313	2.549	DELTAZ X-S98	-5.000	.140	90.000
									.000	.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

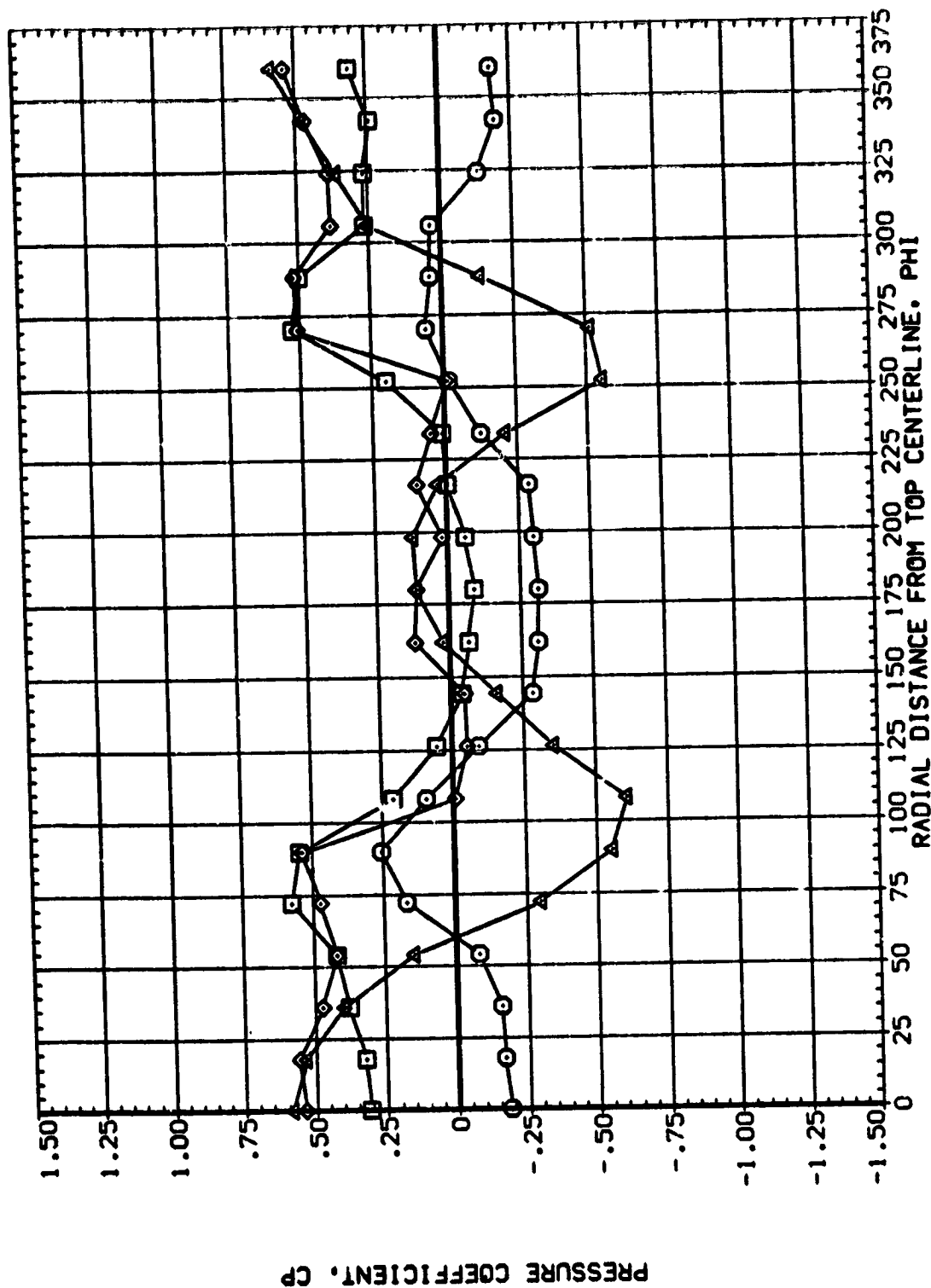
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTAZ	CONF1G	CONF2G
○	.076	-4.000	1.250	6.198	5.313	5.313	2.549	.000	.140	.000	.000
□	.156							.000	.000	.000	.000
◇	.220							.000	.000	.000	.000
△	.236							.000	.000	.000	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

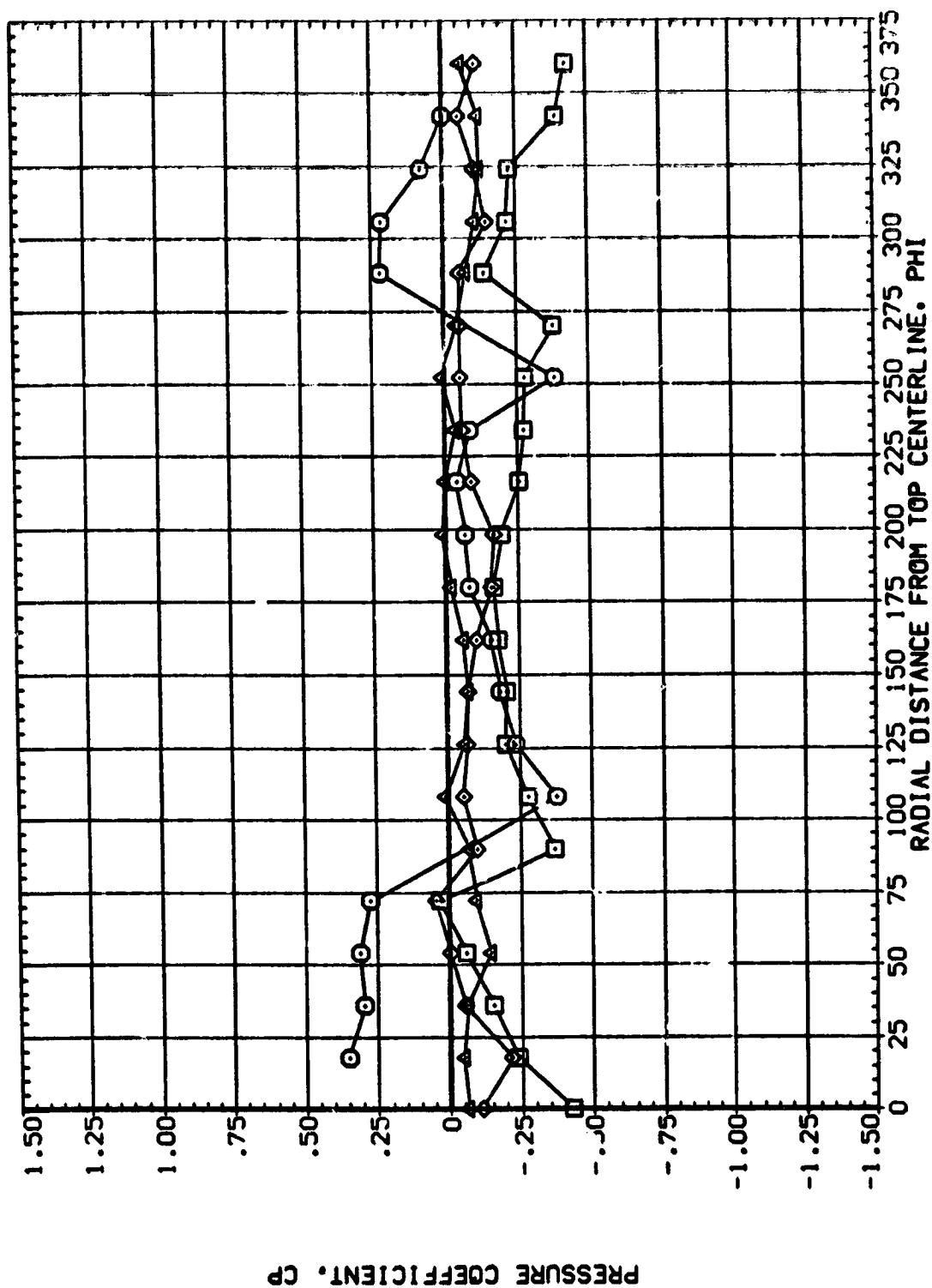
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRI. VALUES
◇	.271	-4.000	1.250	SREF 6.198	-5.000 CONF IG 90.000
□	.314			LREF 5.313	.140 RUDDER .000
◇	.350			BREF 5.313	.000 ORB INC .500
△	.382			XREF 2.549	
				YREF .000	
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	REF	50. IN.	ALPHA	CONFIS	90.000
○	.438	-4.000	1.250	5.313	5.313	IN.	DELTA Z	RJODER	.000
□	.506			5.313	5.313	IN.	X-SR8	.000	0081NC
◇	.573			2.549	2.549	IN.			
△	.641			.000	.000	IN.			
				ZRRP	ZRRP				

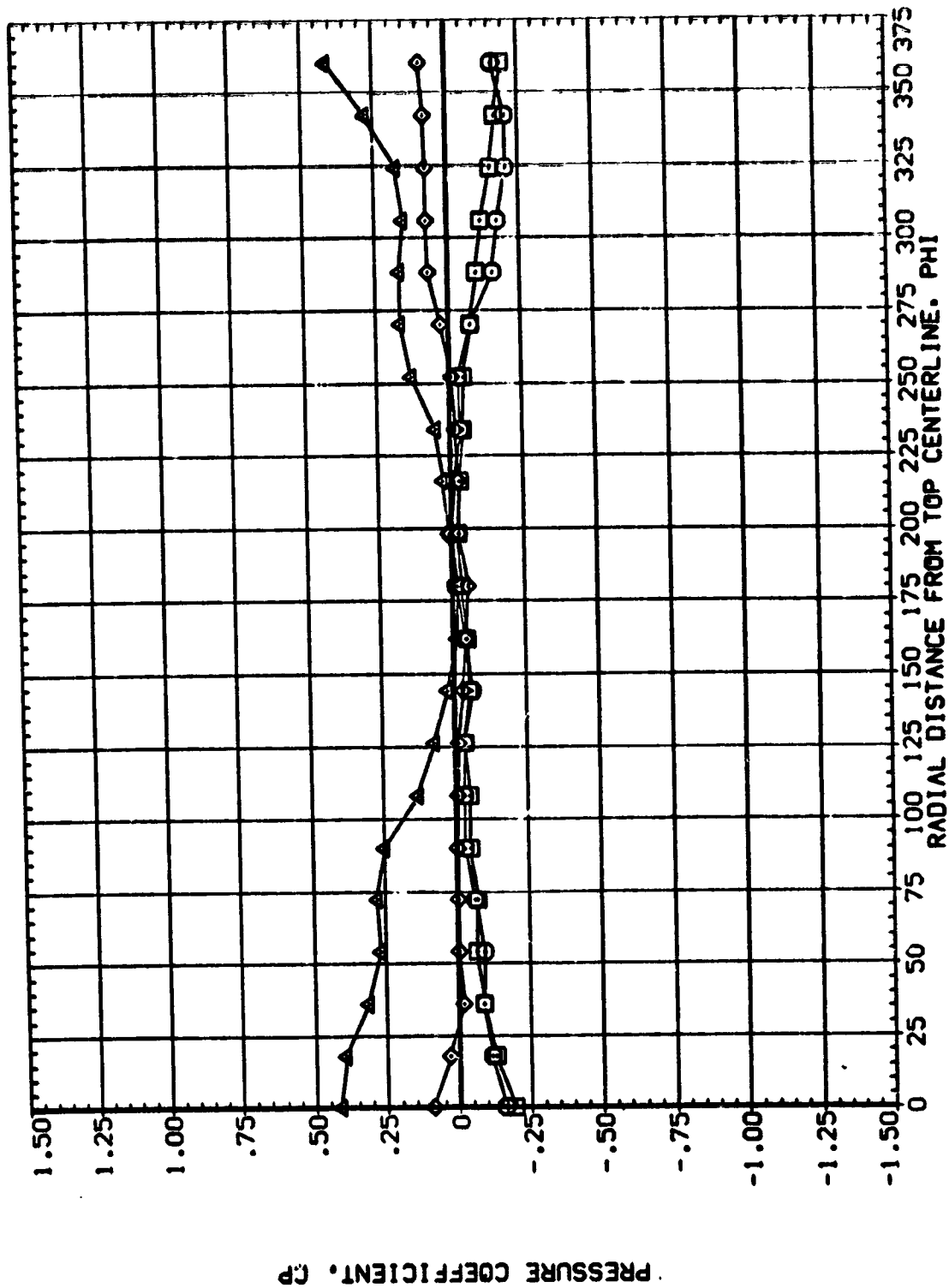


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

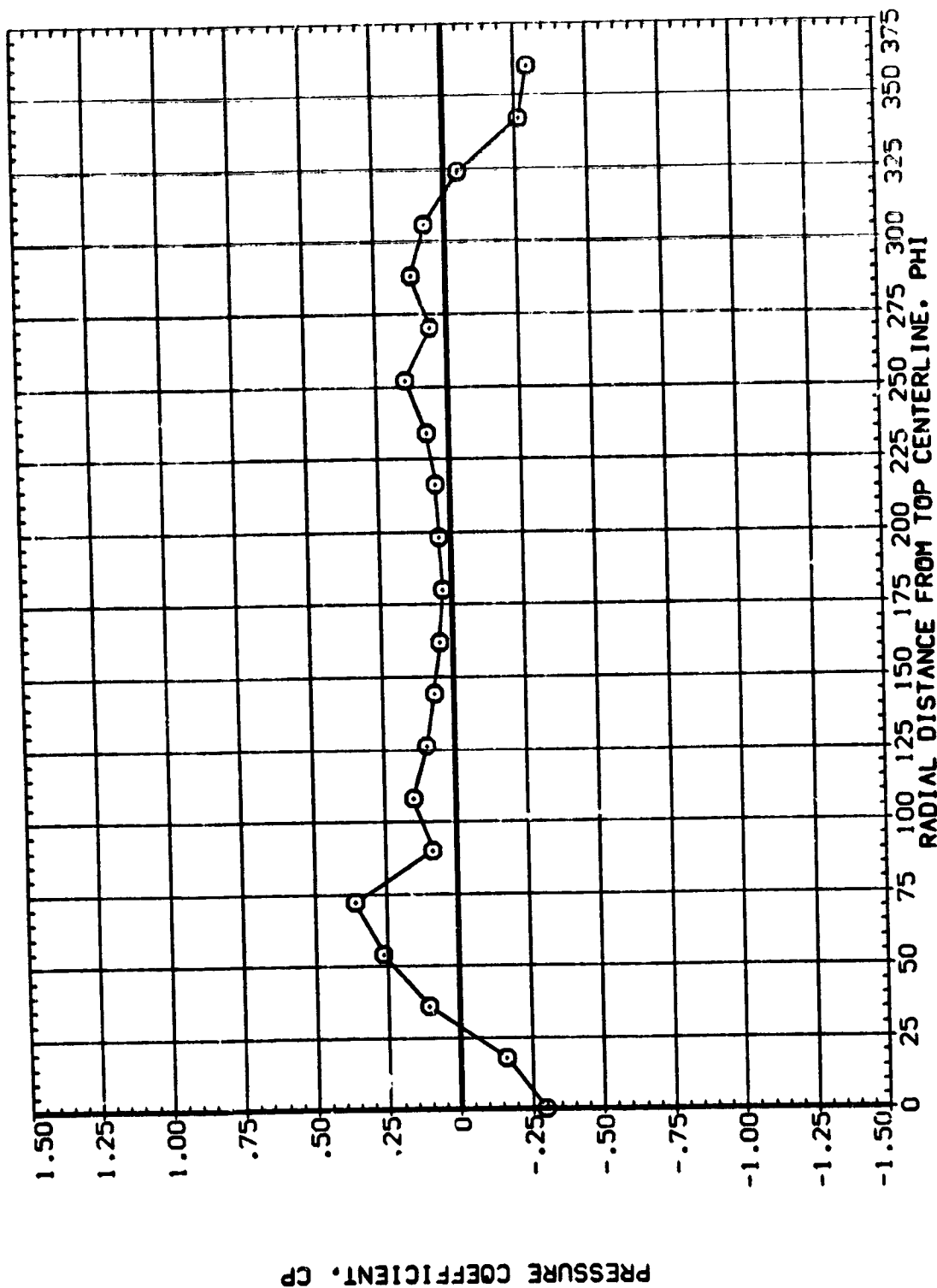
SYMBOL	X/ALT		BETA	MACH	REFERENCE DATA						PARAMETRIC VALUES									
	.708	.776			.844	.912	SREF	LREF	BREF	XPRP	YPRP	ZPRP	SO. IN.	ALPHA	DELTA Z	X-SRB	-5.000	CONF IG	50.000	.000
□			-4.000	1.250								6.198	5.313	5.313	2.549	.000	.140 <td>BLUDD</td> <td>.000<td>.500</td></td>	BLUDD	.000 <td>.500</td>	.500
◇																.000 <td></td> <td>ORBIT</td> <td></td> <td></td>		ORBIT		
△																		X-SRB		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.984	-4.000	1.250	SREF 6.159	-5.000 CONF IS 50.000
				LREF 5.313	.140 RUDDER .000
				BREF 5.313	.000 D98 INC .500
				XPRP 2.549	
				YPRP .000	
				ZPRP .000	
				SG IN.	
				IN.	
				IN.	
				IN.	
				IN.	
				IN.	

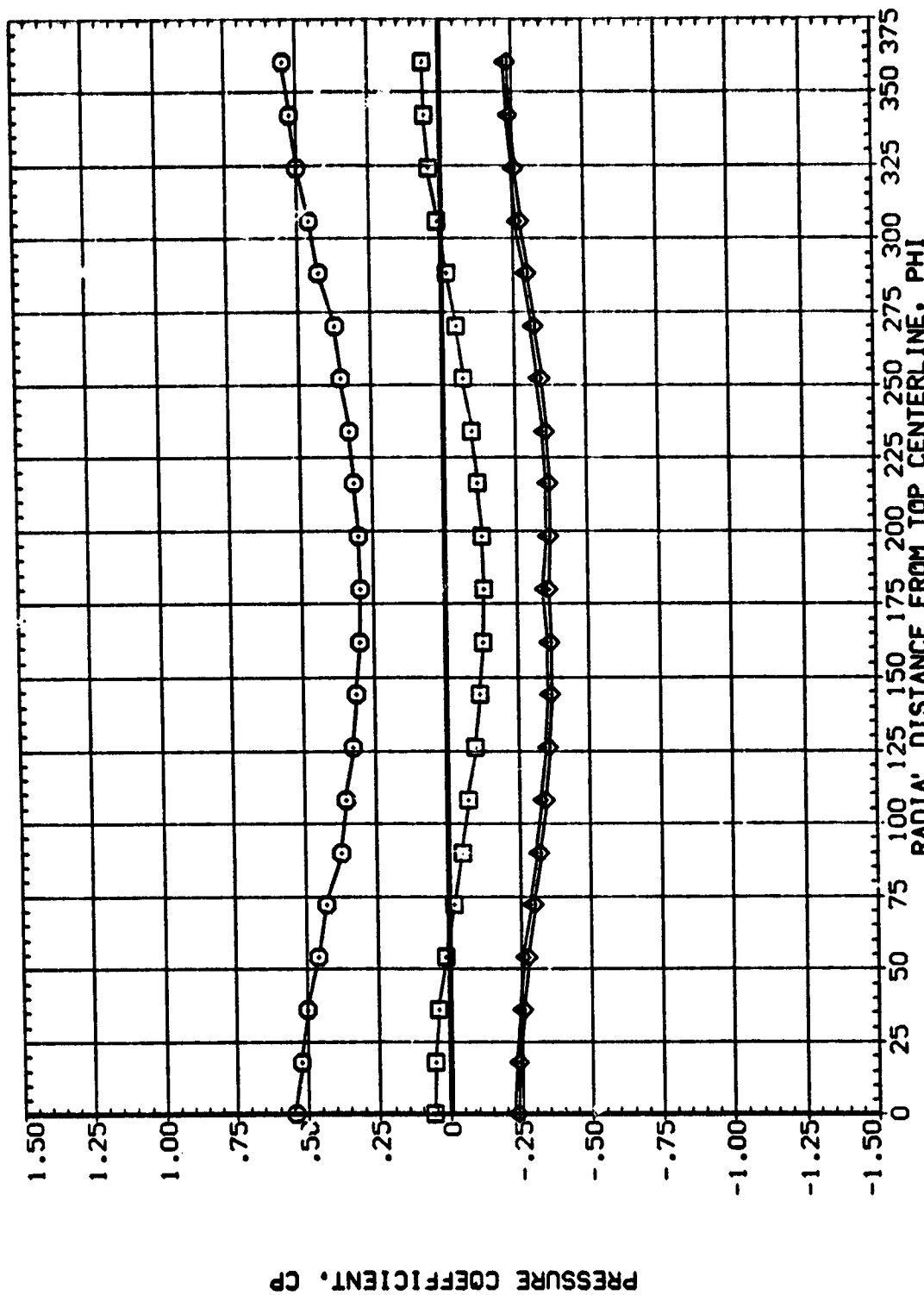


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES		
				SREF	SO. IN.	ALPHA	CONF IG	
○	.076	.000	1.250	5.313	IN.	DELTA Z	RUDER	90.000
□	.155			5.313	IN.	X-SRB	.000	.000
◇	.220			2.549	IN.		.000	.500
△	.235			.000	IN.		0.98 INC	
				ZMRP				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .271  
 .314  
 .350  
 .382

BETA .000

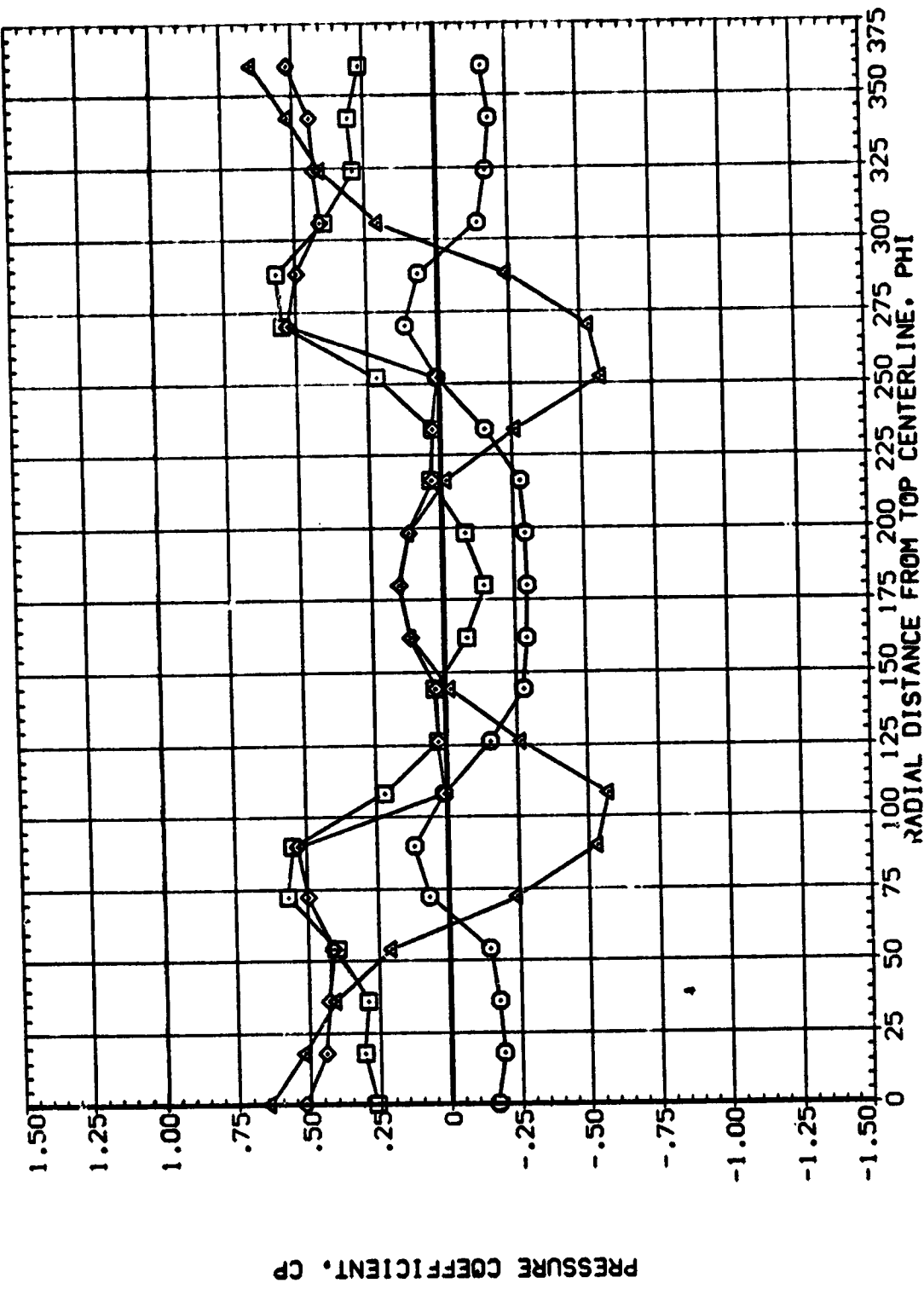
MACH 1.250

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 -5.000  
 .000  
 .140  
 .000  
 90.000  
 .000  
 .500

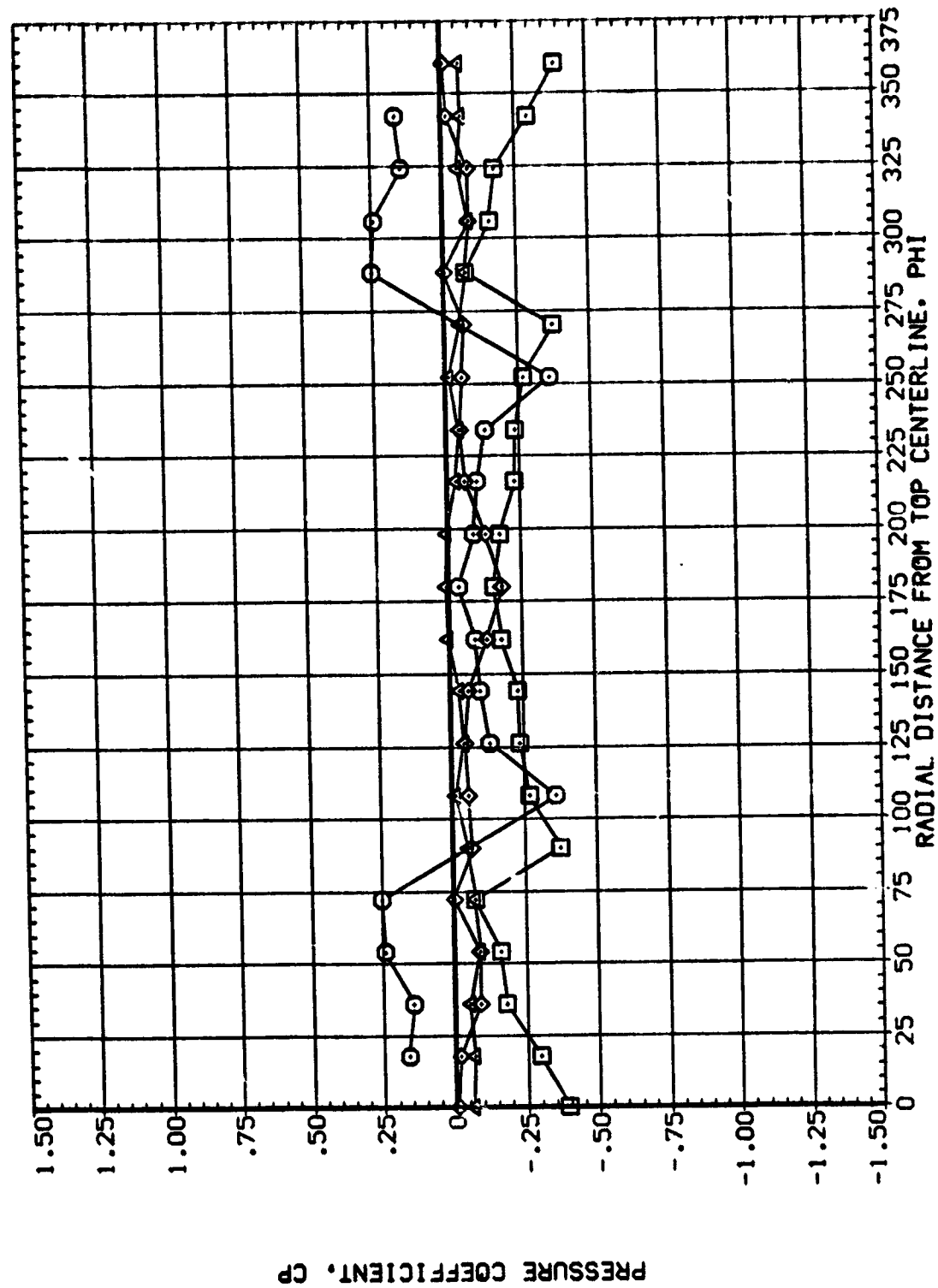


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

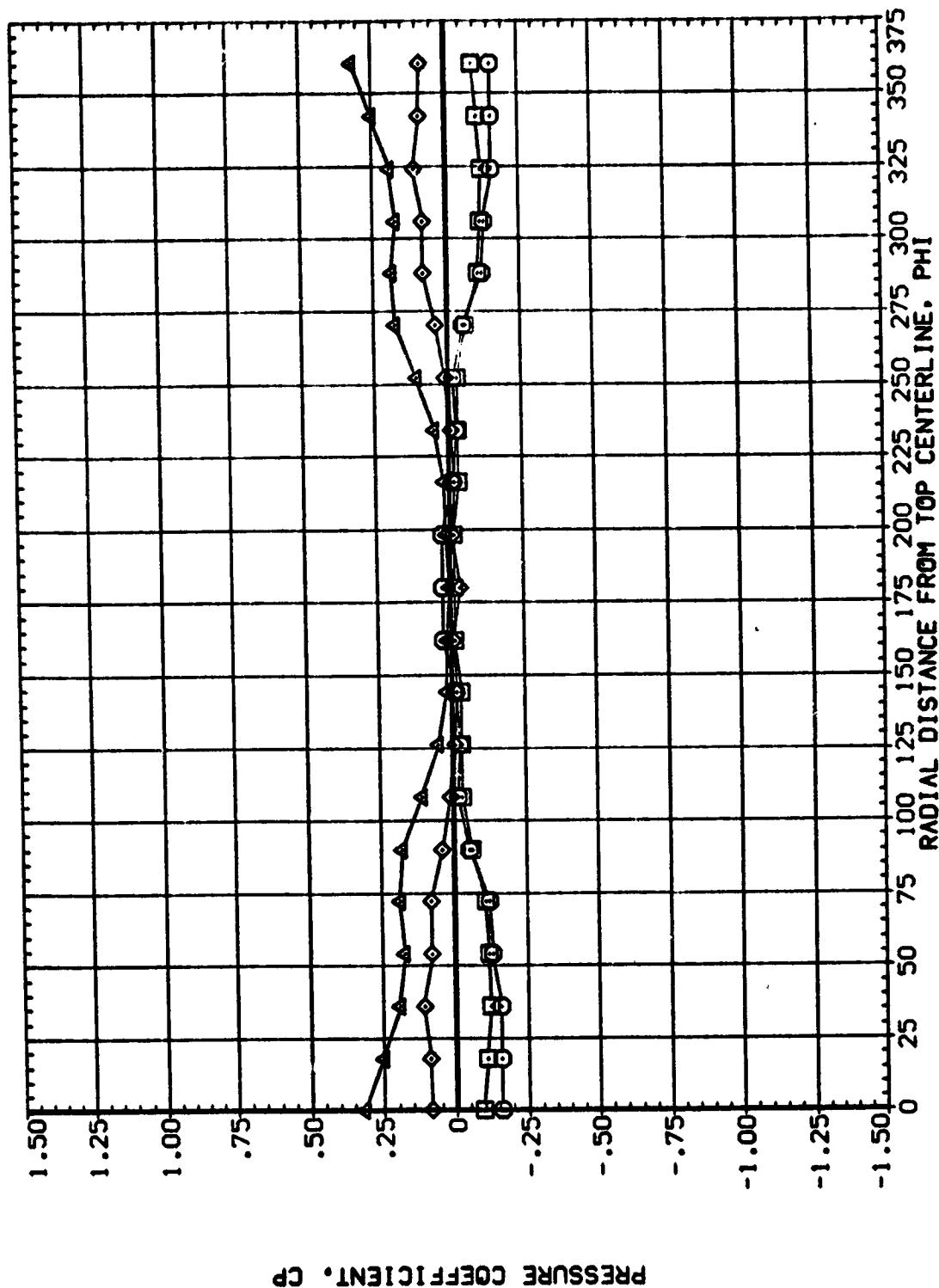
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CONF IG	90.000
○	.438	.000	1.250	6.198	5.313	5.313	2.549	.140	.000	RUDER	.000
◇	.506									ORIGIN	.500
△	.641										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SD, IN.	CONF IG	
□	.708	.000	1.250	LREF	5.313	DELTA Z	90.000
◇	.776			BREF	5.313	RUDDER	.000
△	.844			XPRP	2.549	ORBIT INC	.500
	.912			YPRP	.000		
				ZPRP	.000		



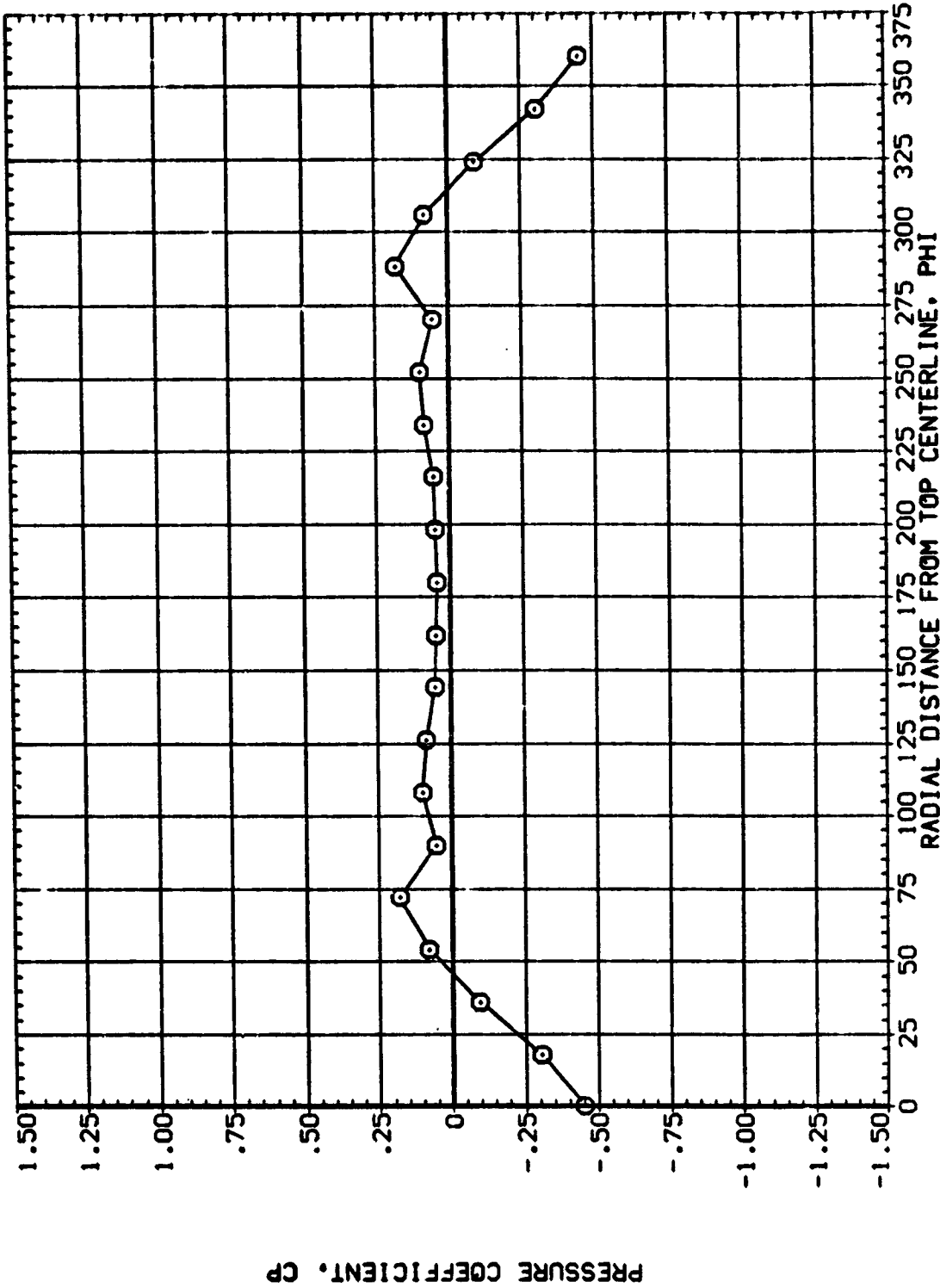
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



0

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CONFIG	ORIGIN
0	.984	.000	1.250	6.198	3.313	3.313	2.549	X-598	.140	.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

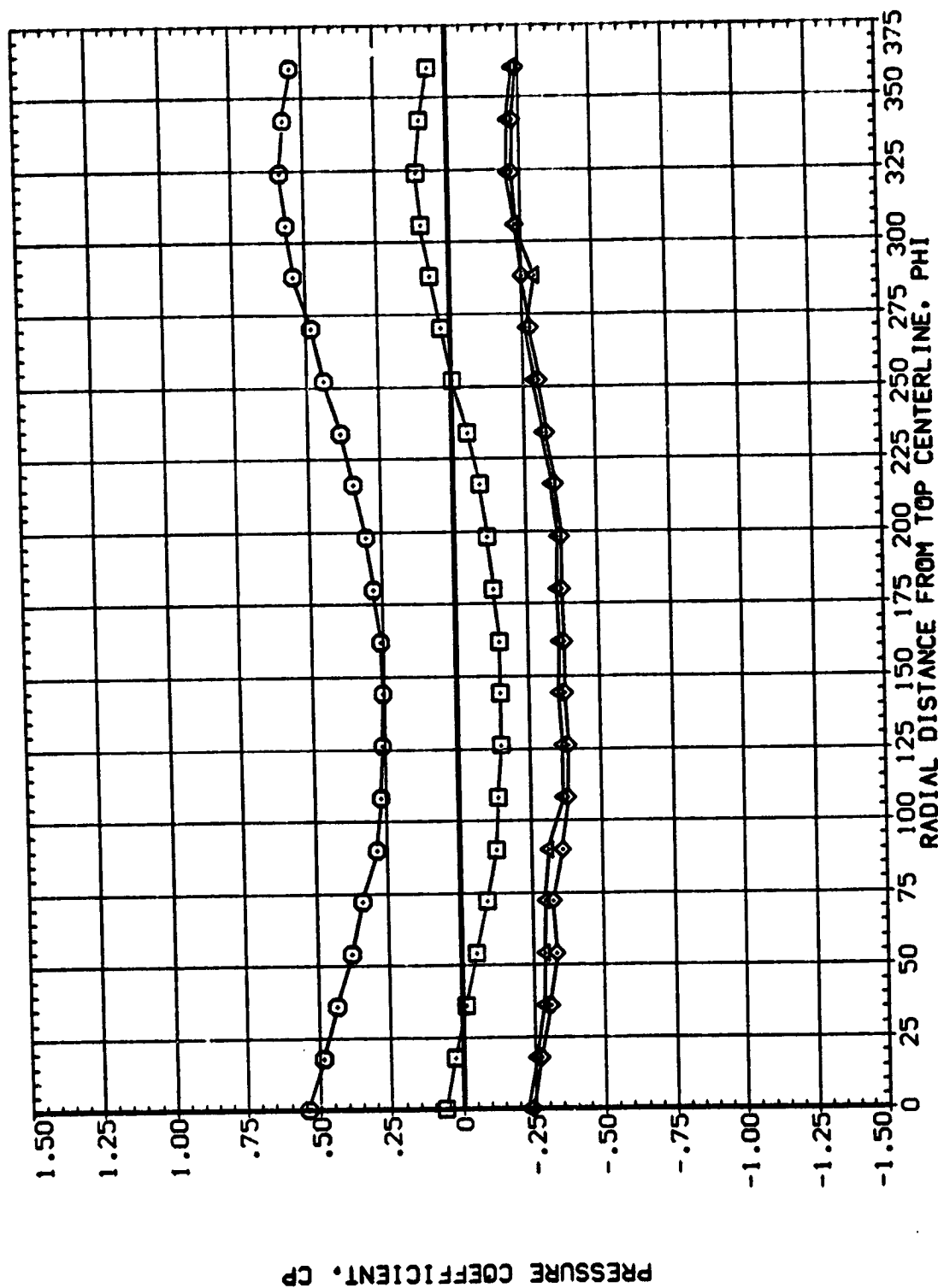
# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○ □ ◇ △

X/LT .076  
 BETA 4.000  
 MACH 1.250

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000  
 .000  
 .500

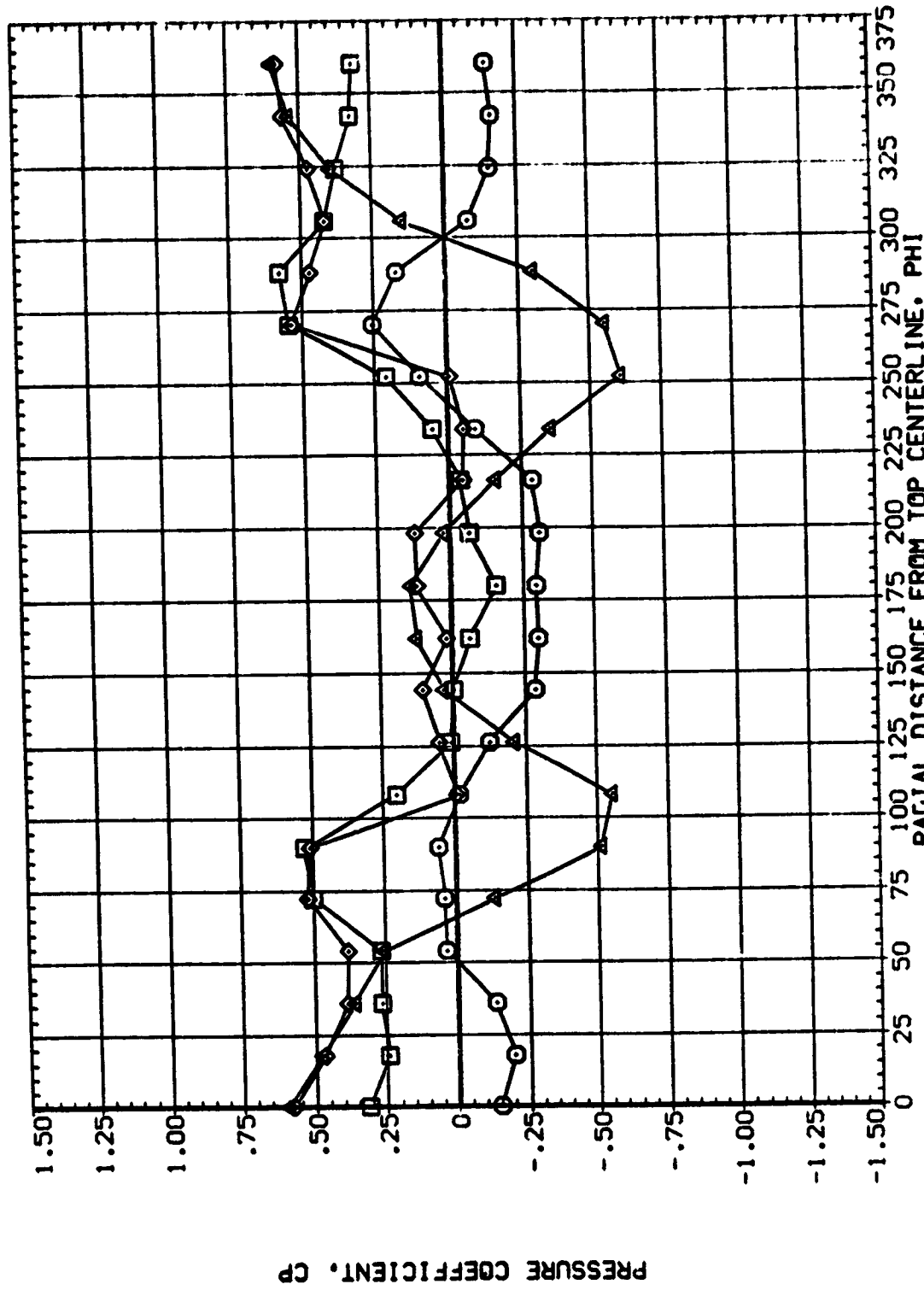


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X, Y, Z	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CONF IG	50.000
○	.271	4.000	1.250	6.198	5.313	5.313	2.549	.140	.000	RUDDER	.000
□	.360									ORBIT	.500
△	.382										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .438  
 .506  
 .573  
 .641

BETA 4.000

MACH 1.250

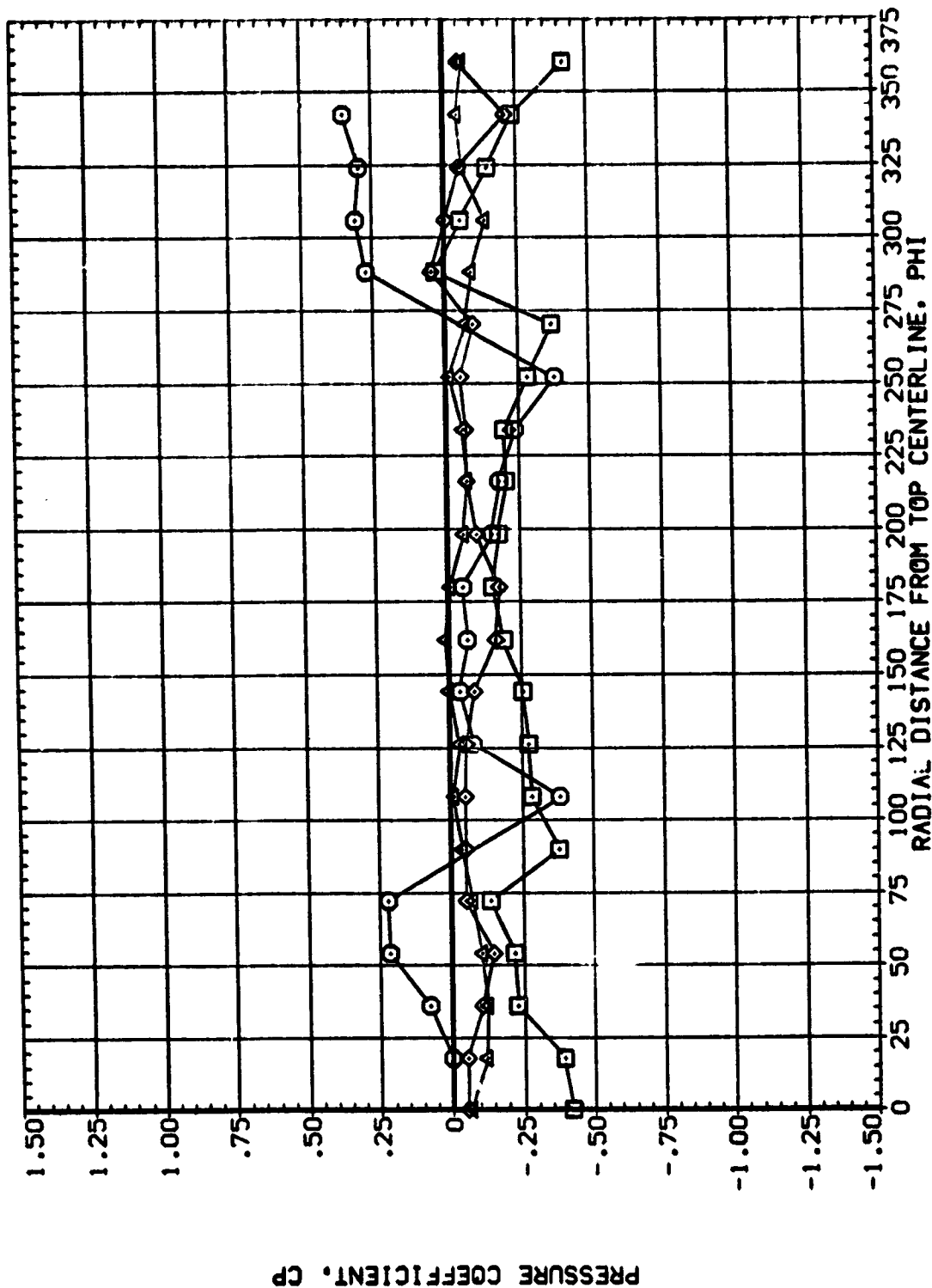
REFERENCE DATA  
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 LREF 5.313  
 BREF 5.313  
 XTRP 2.549  
 YMF2 .000  
 ZMRP .000

PARAMETRIC VALUES  
 -5.070  
 .140  
 .000  
 .000  
 .500

CONF IG  
 RUDDER  
 ORBINC

ALPHA  
 DELTAZ  
 X-SRB

50. IN.  
 IN.  
 IN.  
 IN.  
 IN.

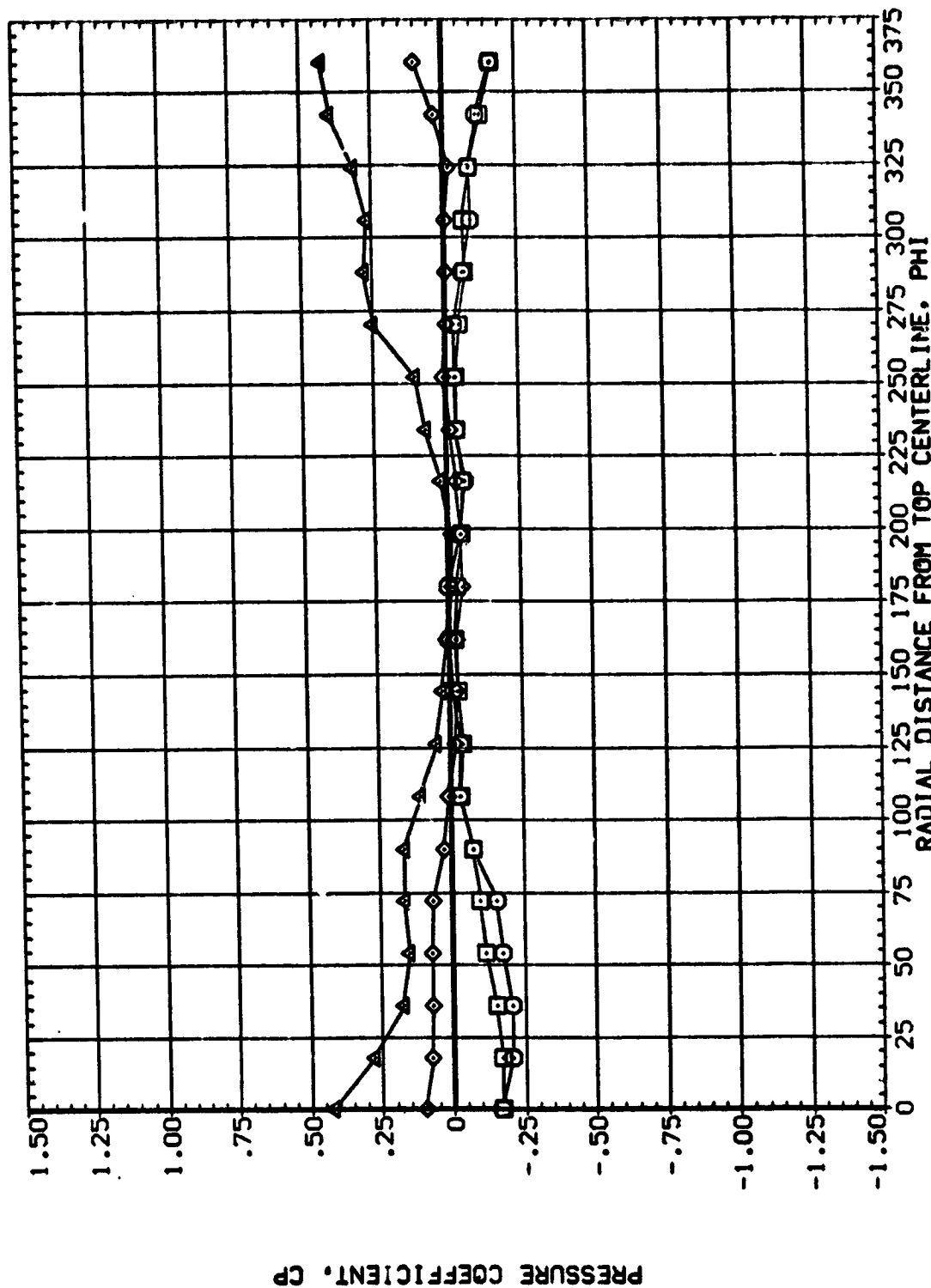


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

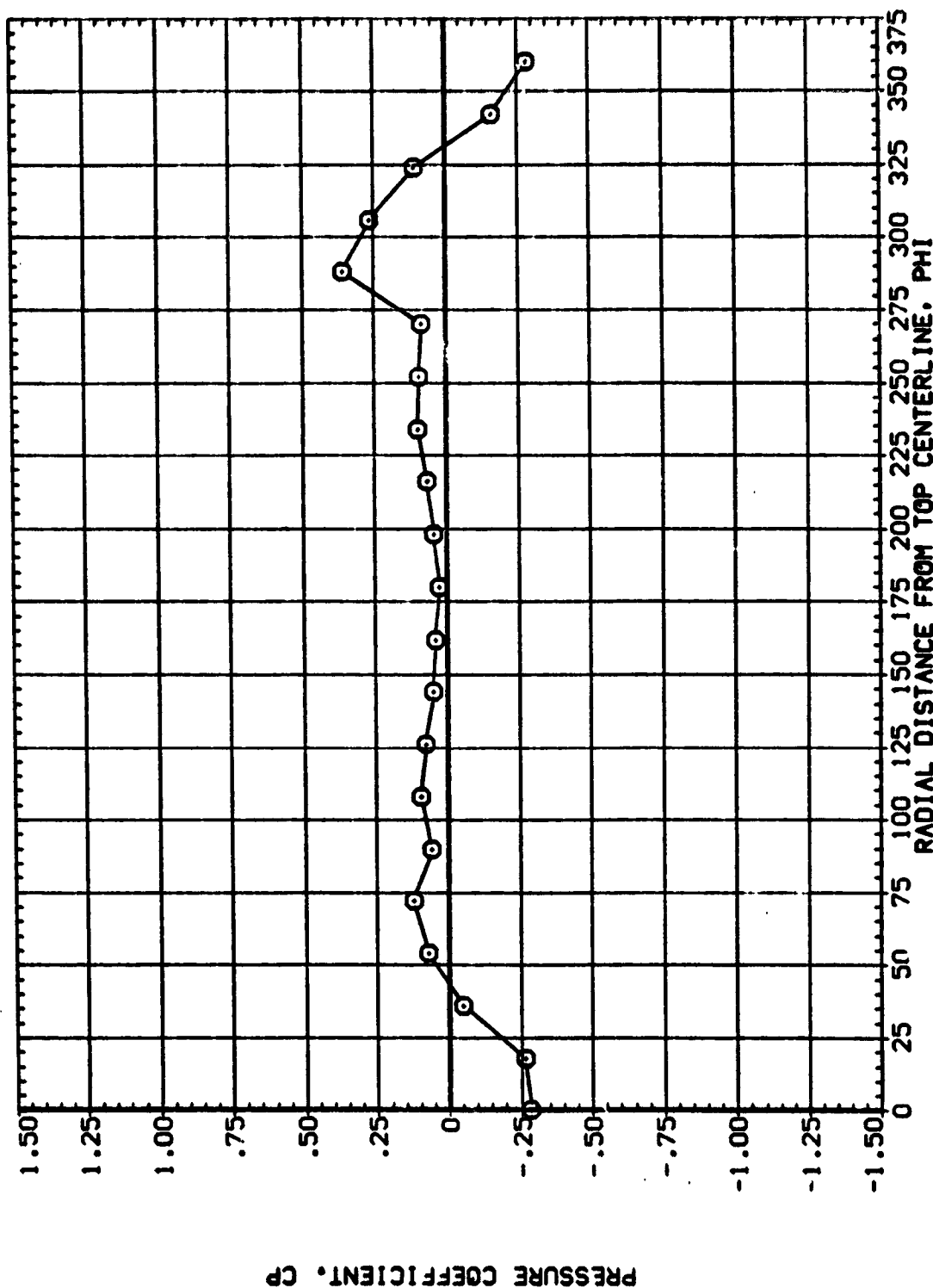
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	DELTA Z	CONF 16	RUDER
○	.708	4.000	1.250	6.198	5.313	5.313	2.549	X-SRB	.000	.000	.500
□	.776										
◇	.844										
△	.912										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONF16	CONF16	CONF16
0	.984	4.000	1.250	6.198	5.313	5.313	2.549	X-988	.140	.000	.500
				YREF	ZREF			DELTA Z			
								X-988			

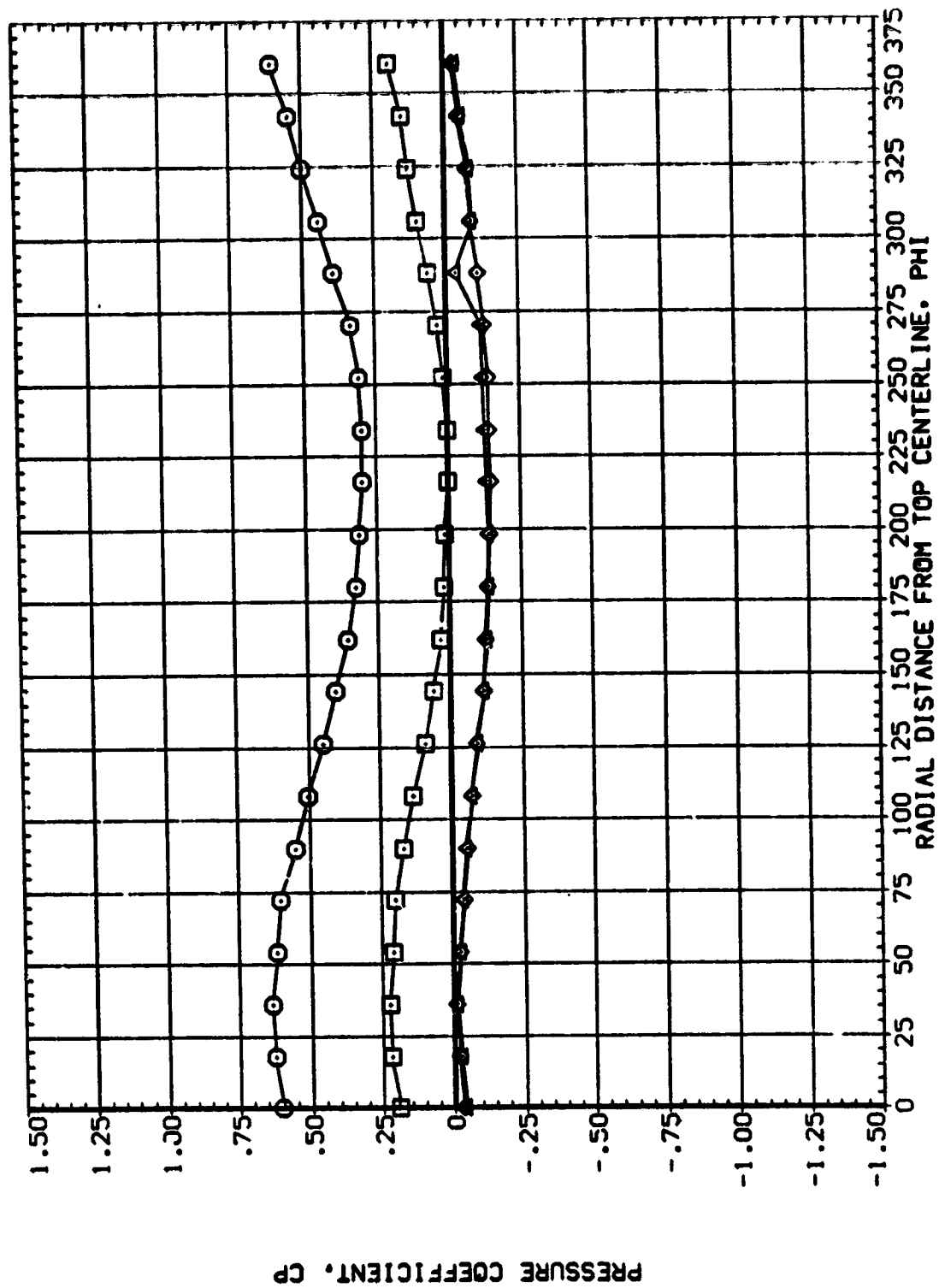


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

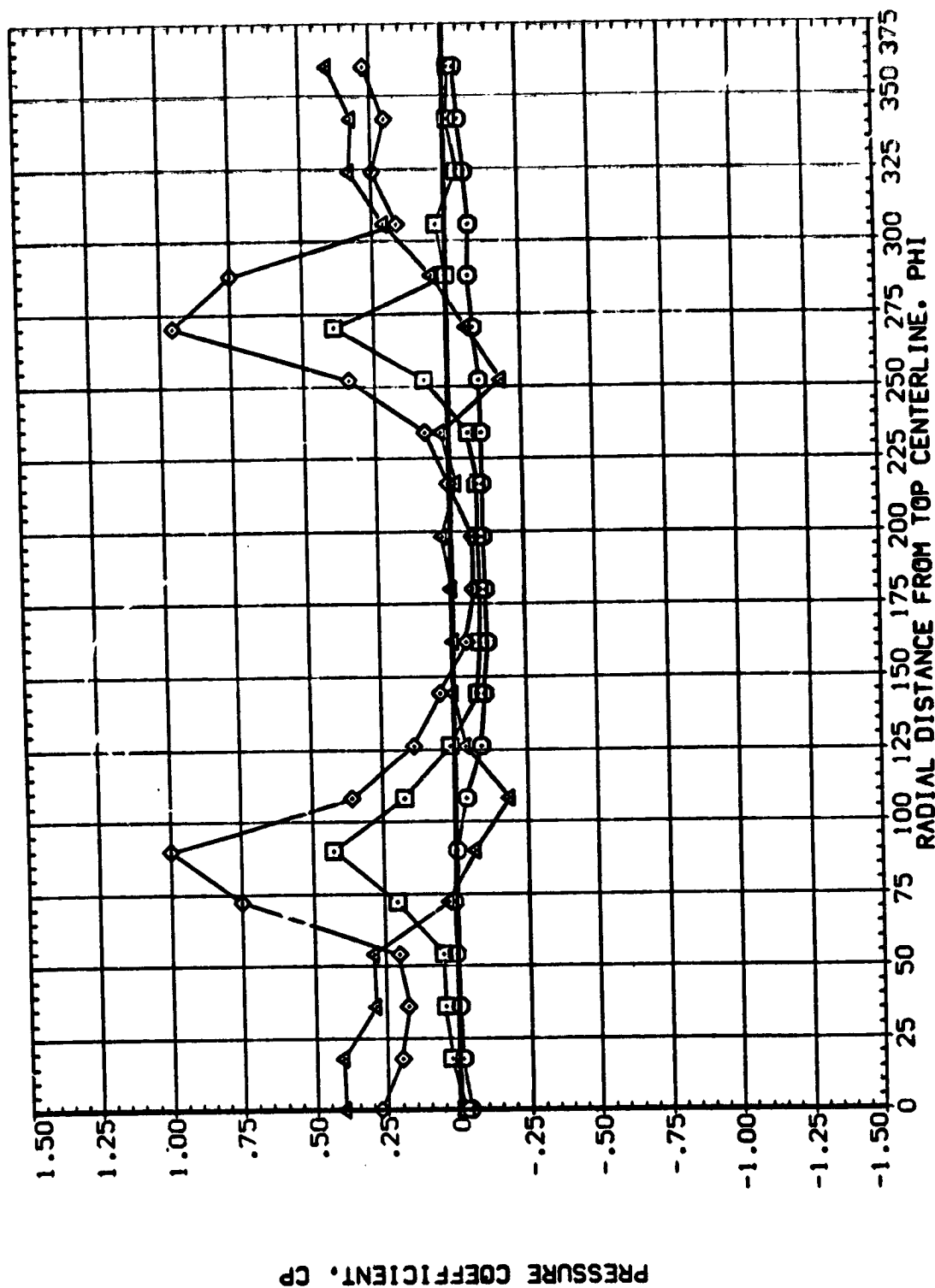
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	50. IN.	ALPHA	CONF IG
○	.076	-4.000	1.960	LREF	5.313	DELTA Z	BLUDDER
□	.155			BREF	5.313	X-SRB	ORBITAL
◇	.220			YREF	2.549		
△	.235			ZREF	.000		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.271	-4.000	1.960	SREF 6.198	-5.000
□	.314			LREF 5.313	.140
◇	.350			BREF 5.313	.000
△	.382			XREF 2.549	.000
				YREF .000	.500
				ZREF .000	

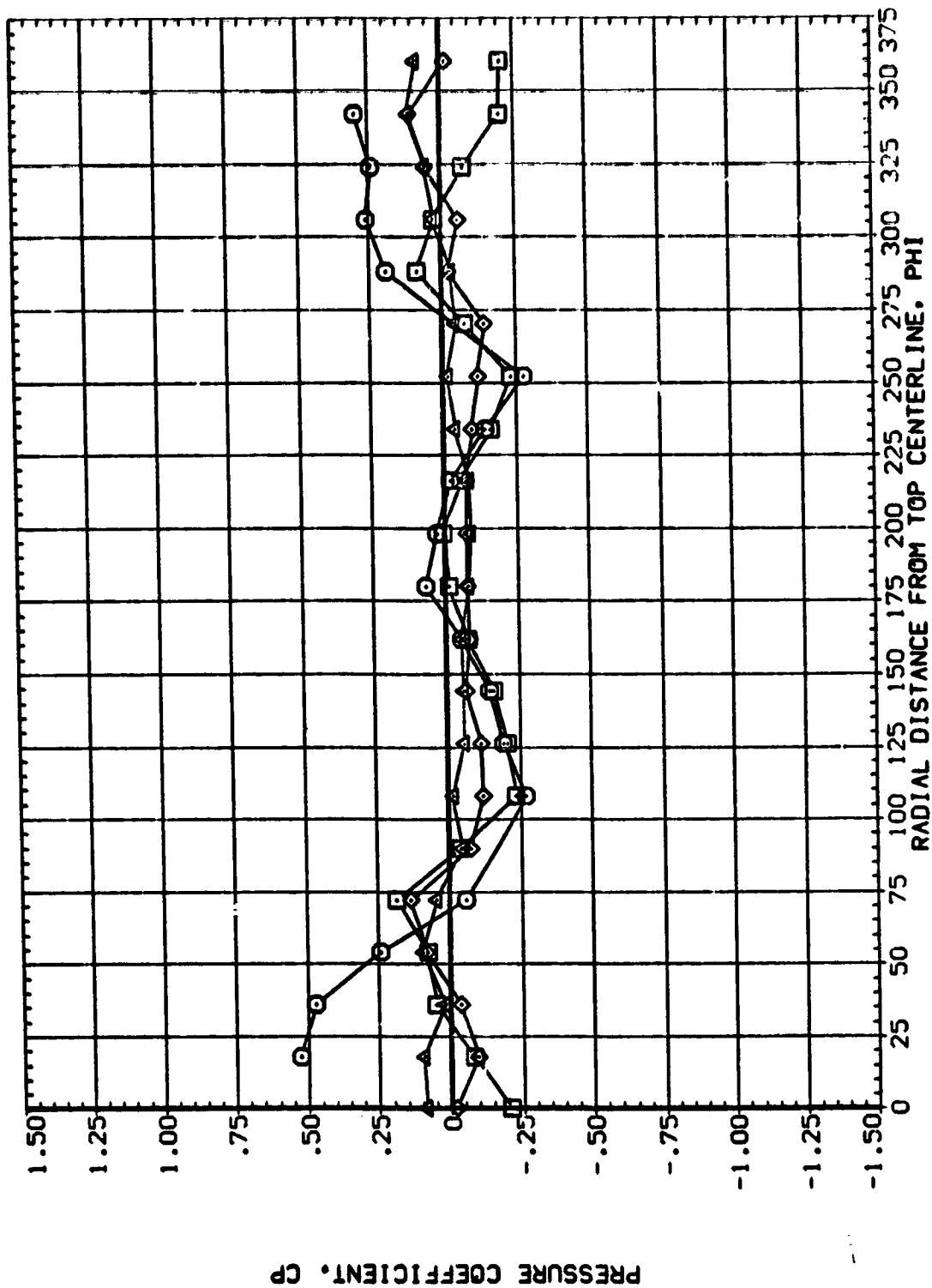


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (182T04)

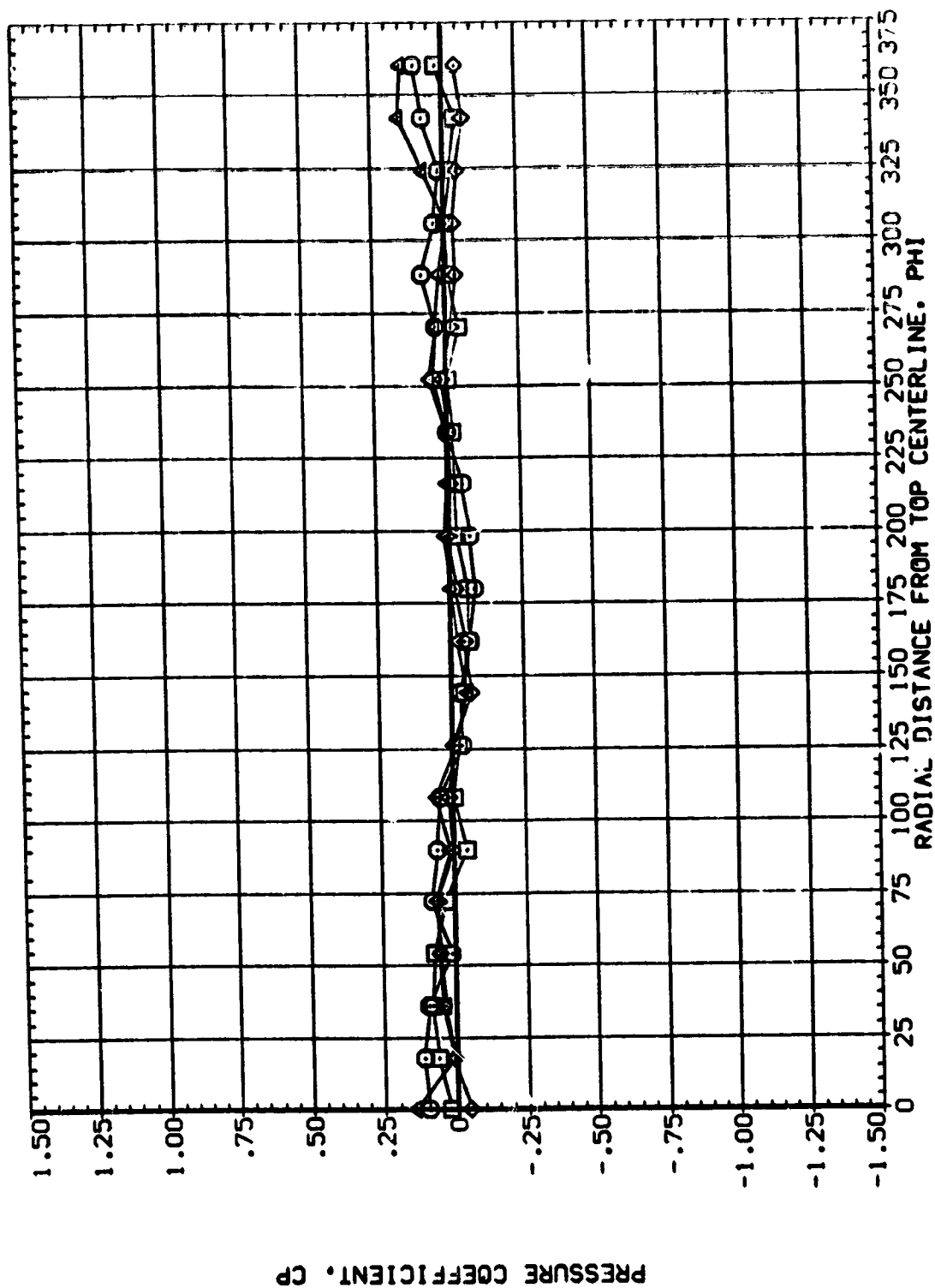
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	XREF	ZREF	ΔPMA	DELTA Z	CONFIG	90.000
○	.438	-4.000	1.960	6.198	5.313	5.313	2.549	0.000	.140	RUDER	.000
□	.506							X-528		DRBINC	.500
◇	.573										
△	.641										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.708	-4.000	1.960	SREF 6.198	-5.000
□	.776			LREF 5.313	.000
◇	.844			BREF 5.313	.140
△	.912			XREF 2.549	.000
				YREF .000	.000
				ZREF .000	.500

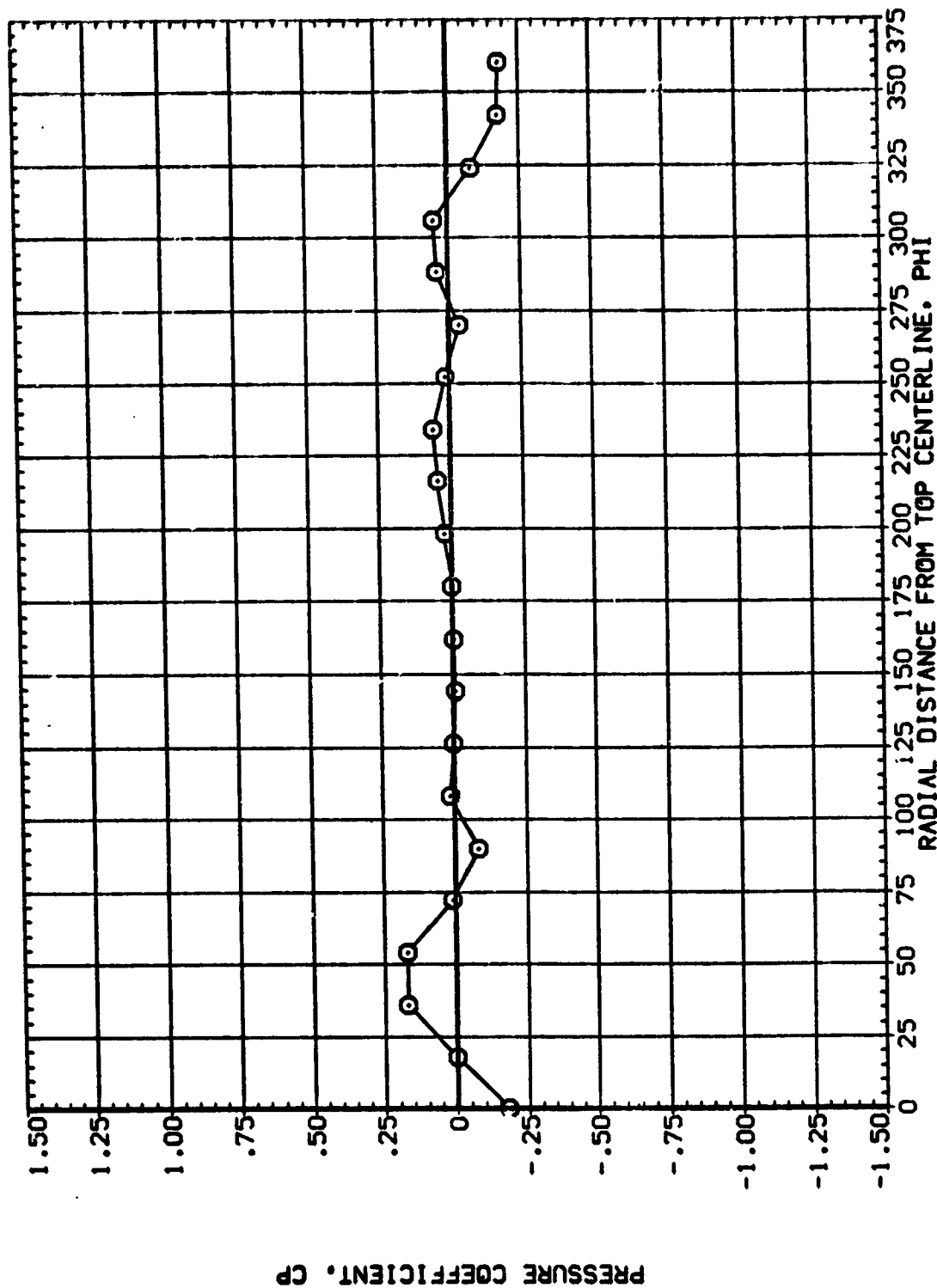


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

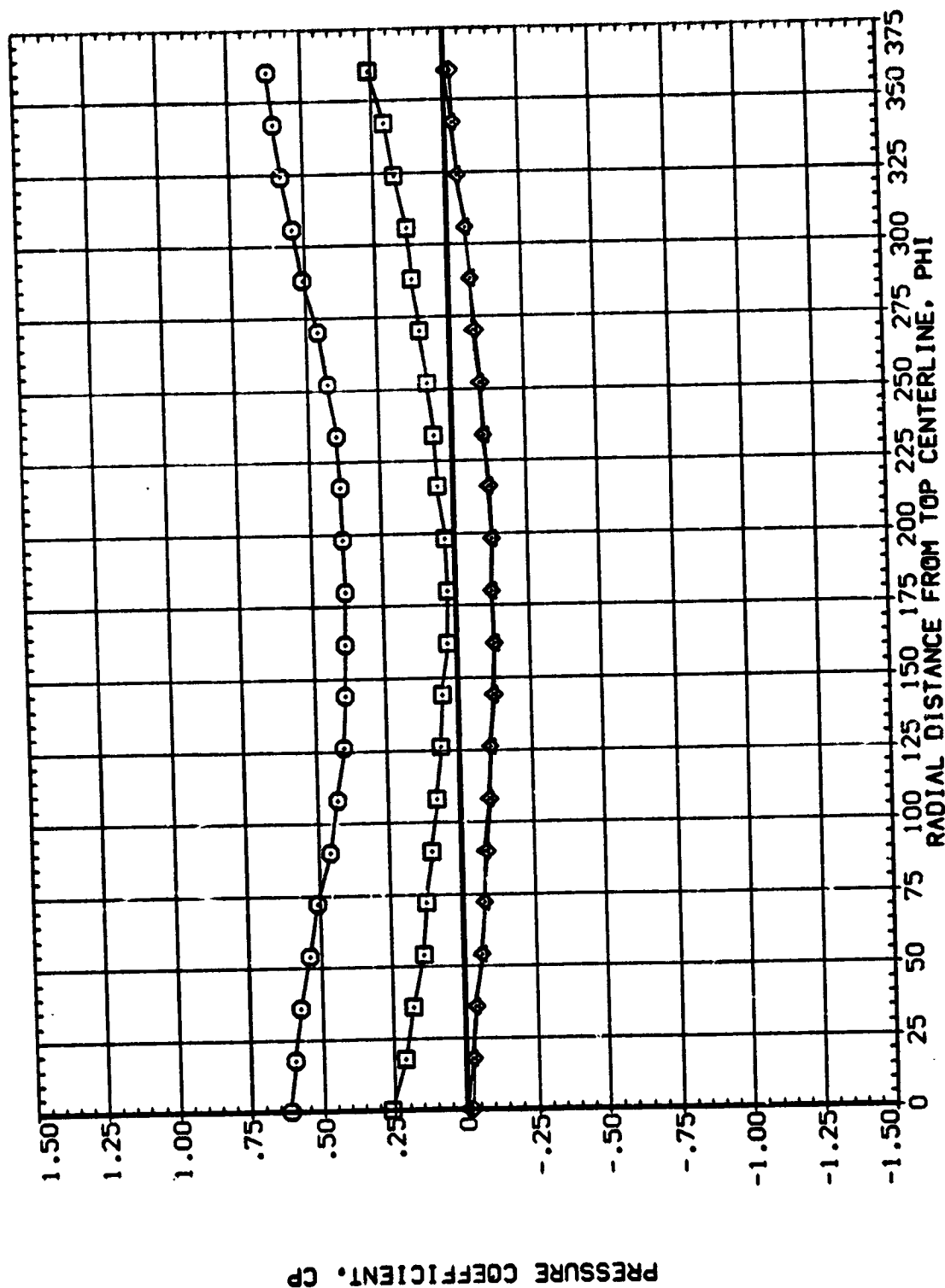
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	ALPHA	-5.000	CONF IG	90.000
O		-4.000	1.980	LREF	5.313	DELTA Z	.140	RLODR	.000
				BREF	5.313	X-SRB	.000	DRBINC	.500
				XMRP	2.549				
				YMRP	.000				
				ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YREF	SO. IN.	ALPHA	CONF16	CONF16
○	.076	.000	1.960	6.199	5.313	5.313	2.549	IN.	X-S98	.140	RLODER
□	.155							IN.		.000	DRBINC
◇	.220							IN.			
△	.235							IN.			

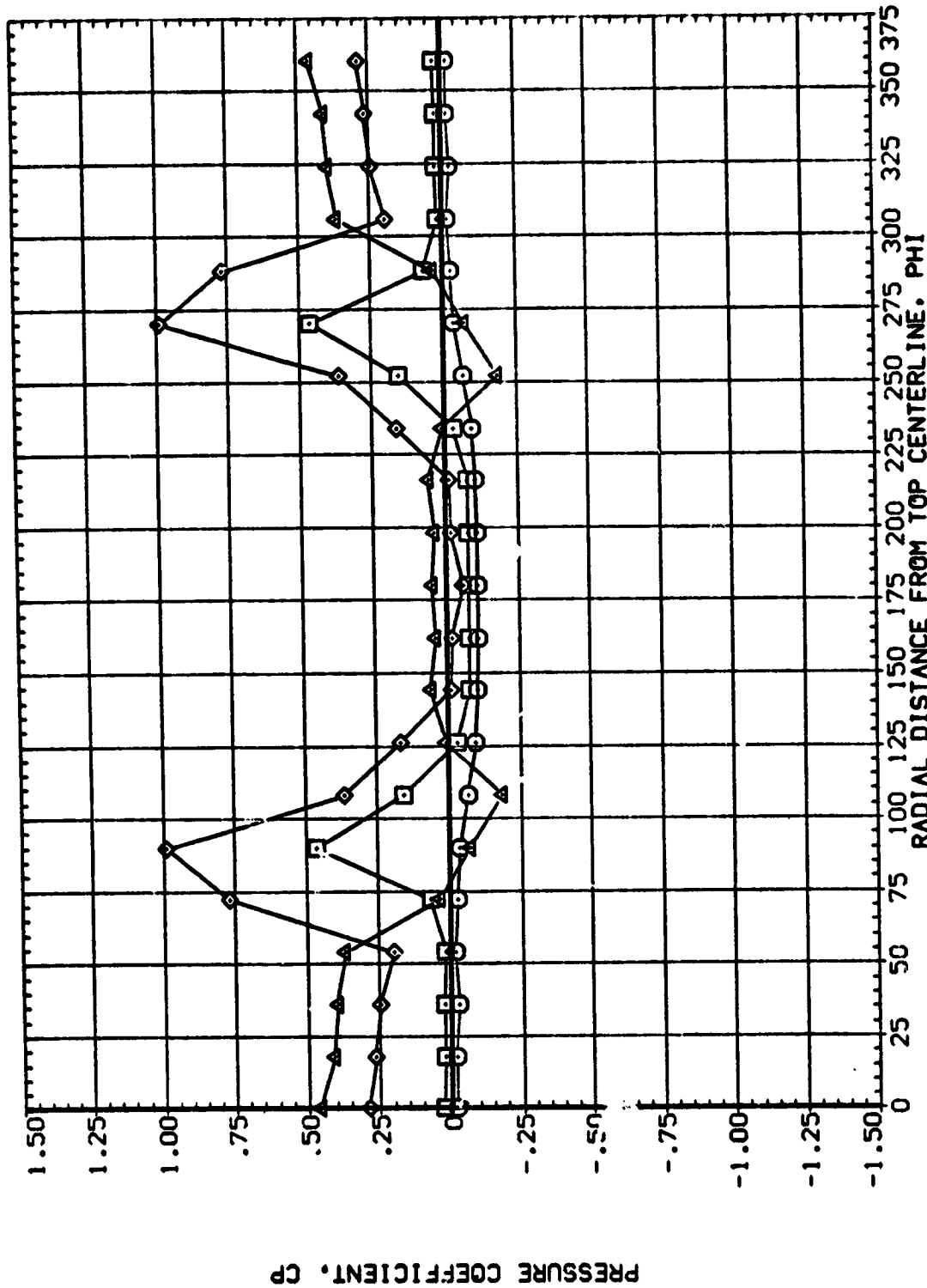


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

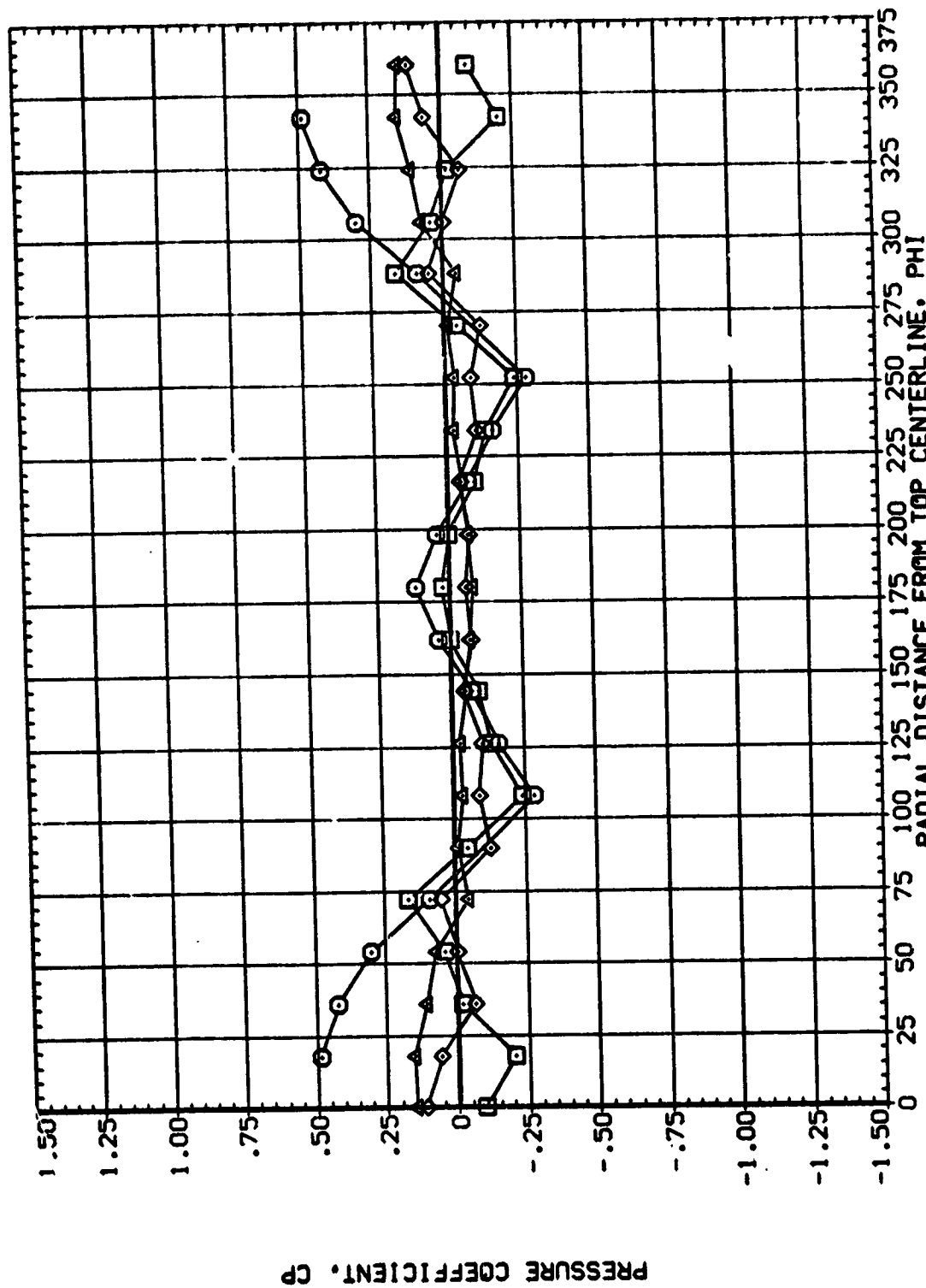
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				SREF	LREF	BREF	XMRP	SD. IN.	ALPHA	DELTA Z	CONFIG
□	.271	.000	1.950	6.198	5.313	5.313	2.549	IN.	-5.000	.140	RUDER
◇	.314							IN.	.000	.000	DR8 INC
△	.350							IN.			
▽	.382							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

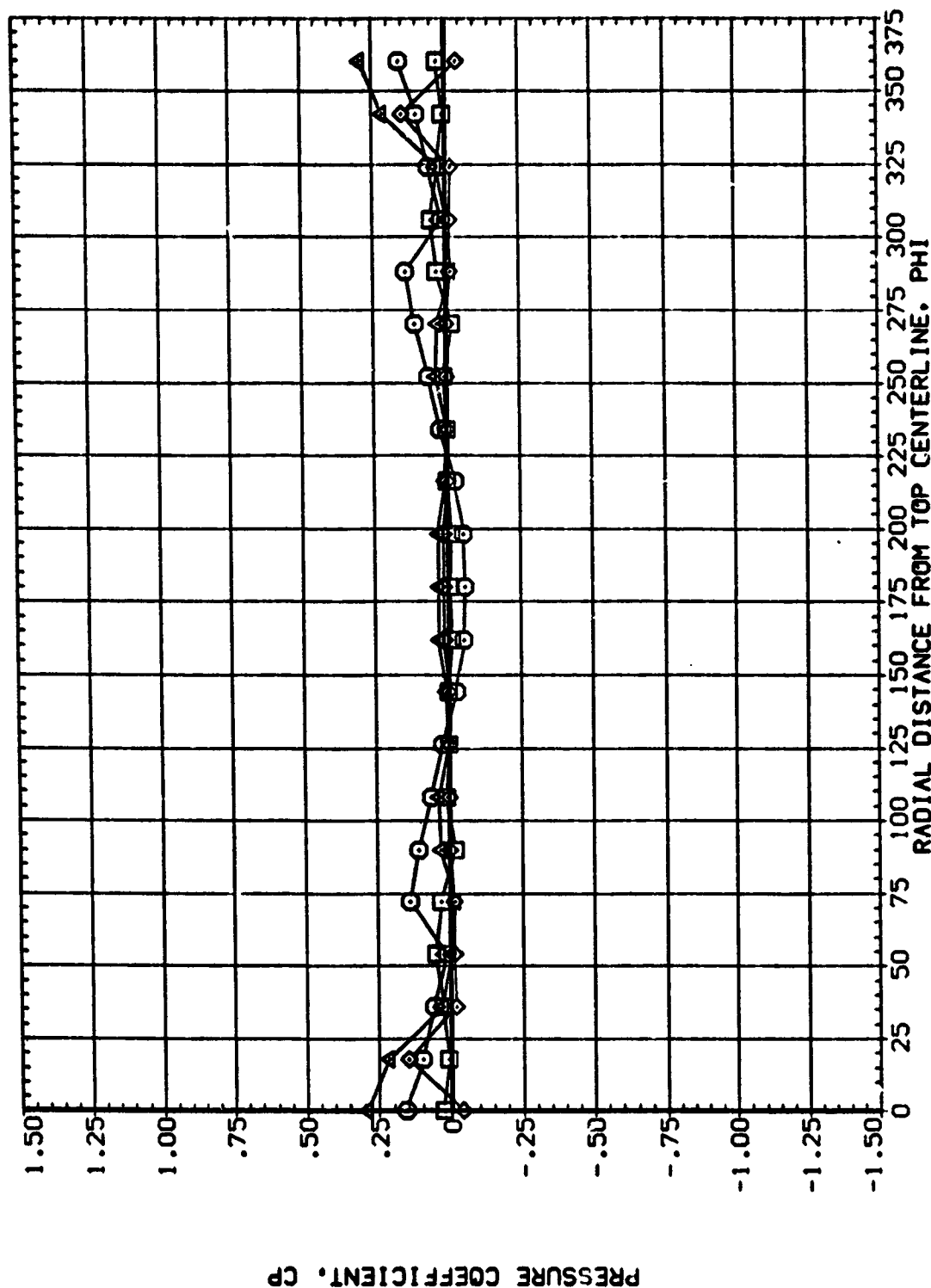
SYMBOL	X/LT		BETA	MACH	REFERENCE DATA		ALPHA		PARAMETRIC VALUES	
					SREF	6.198	SO. IN.			
○	.438		.000	1.960	LREF	5.313	IN.	DELTA Z	.140	CONF IG
□	.506				BREF	5.313	IN.	X-SRB	.000	RUDDER
◇	.573				XREF	2.549	IN.		.000	ORBIT INC
△	.641				YREF	.000	IN. <th></th> <th></th> <th></th>			
					ZREF	.000	IN. <th></th> <th></th> <th></th>			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

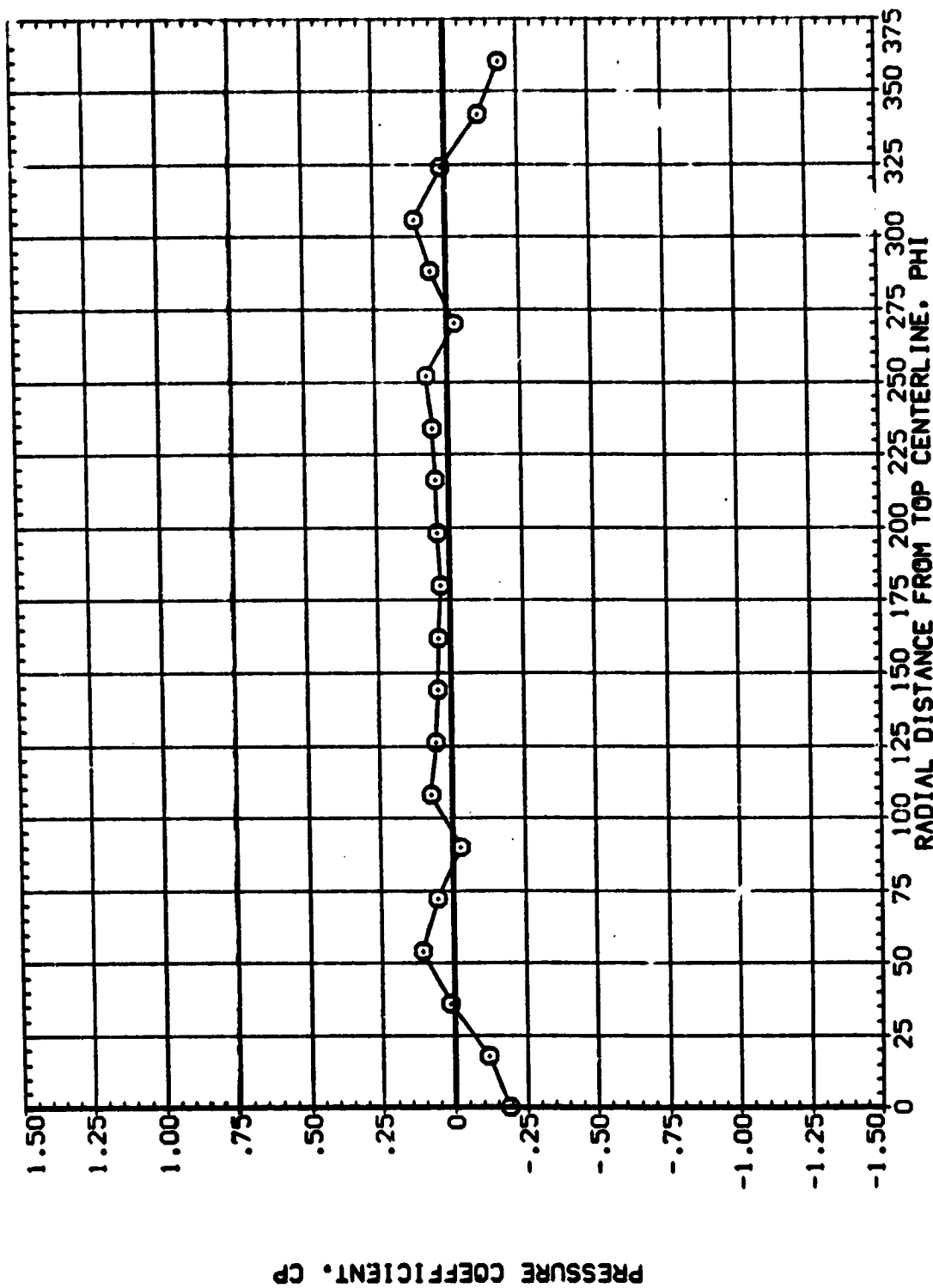
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
○	.708	.000	1.960	SREF	6.198	IN.	50. IN.	ALPHA	-5.000	CONF IG	50.000
□	.776			LREF	5.313	IN.	IN.	DELTA Z	.140	RUDER	.000
◇	.844			BREF	5.313	IN.	IN.	X-SRB	.000	ORBIT INC	.500
△	.912			XMRP	2.549	IN.	IN.				
				YMRP	.000	IN.	IN.				
				ZMRP	.000	IN.	IN.				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

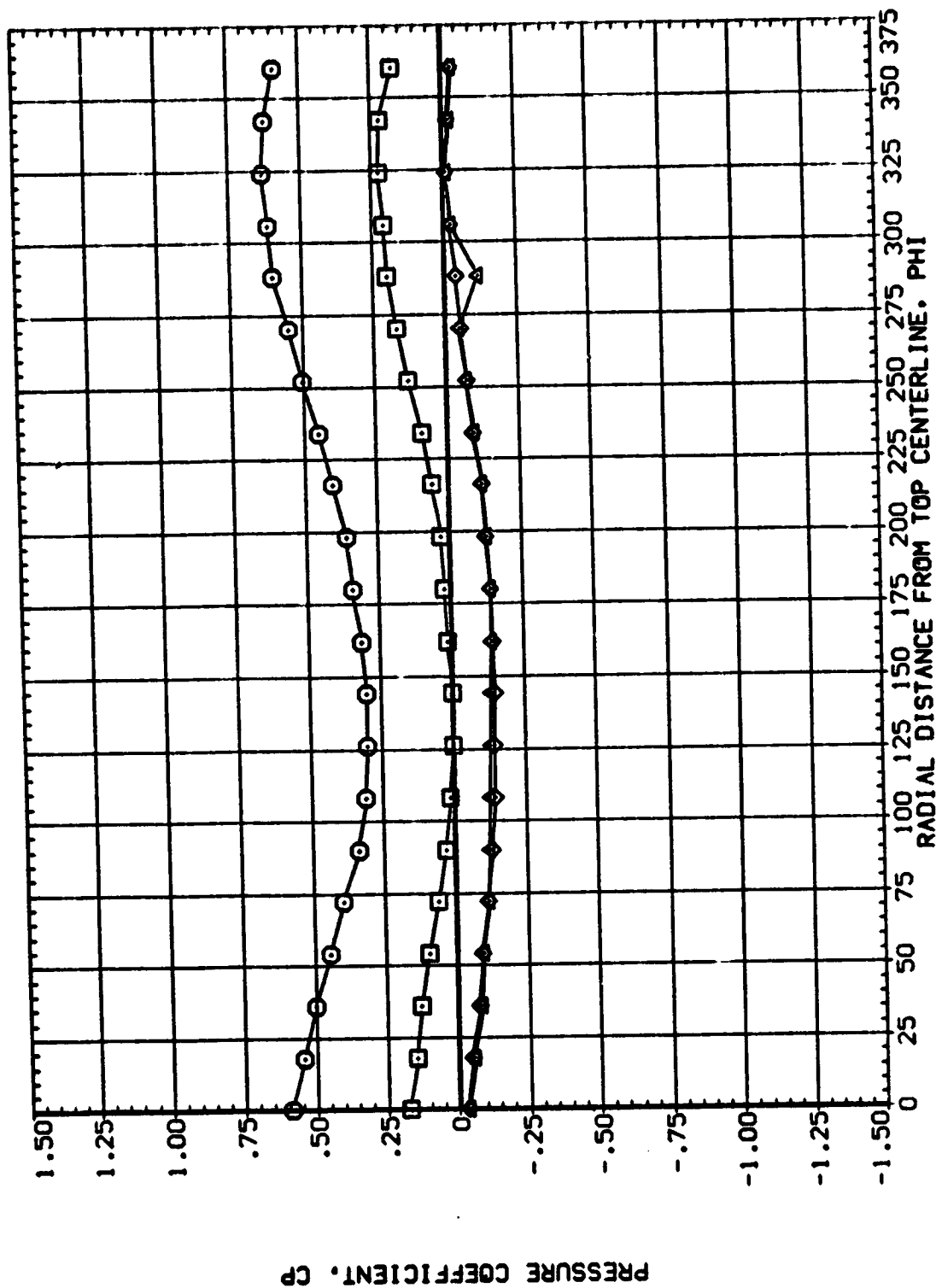
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	SD. IN.	ALPHA	DELTA Z	CONFIG
0	.984	.000	1.960	6.198	5.313	5.313	2.549	IN.	0.000	0.000	50.000
								IN.	X-508	RUDDER	.000
								IN.		ORGINC	.500
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONF IG	
○	.076	4.000	1.960	6.198	50. IN.	-5.000	90.000
□	.155			5.313	IN.	.140	.000
◇	.220			5.313	IN.	.000	.500
△	.235			2.549	IN.	.000	
				YMRP	IN.		
				ZMRP	IN.		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .271  
 .314  
 .350  
 .382

BETA 4.000

MACH 1.950

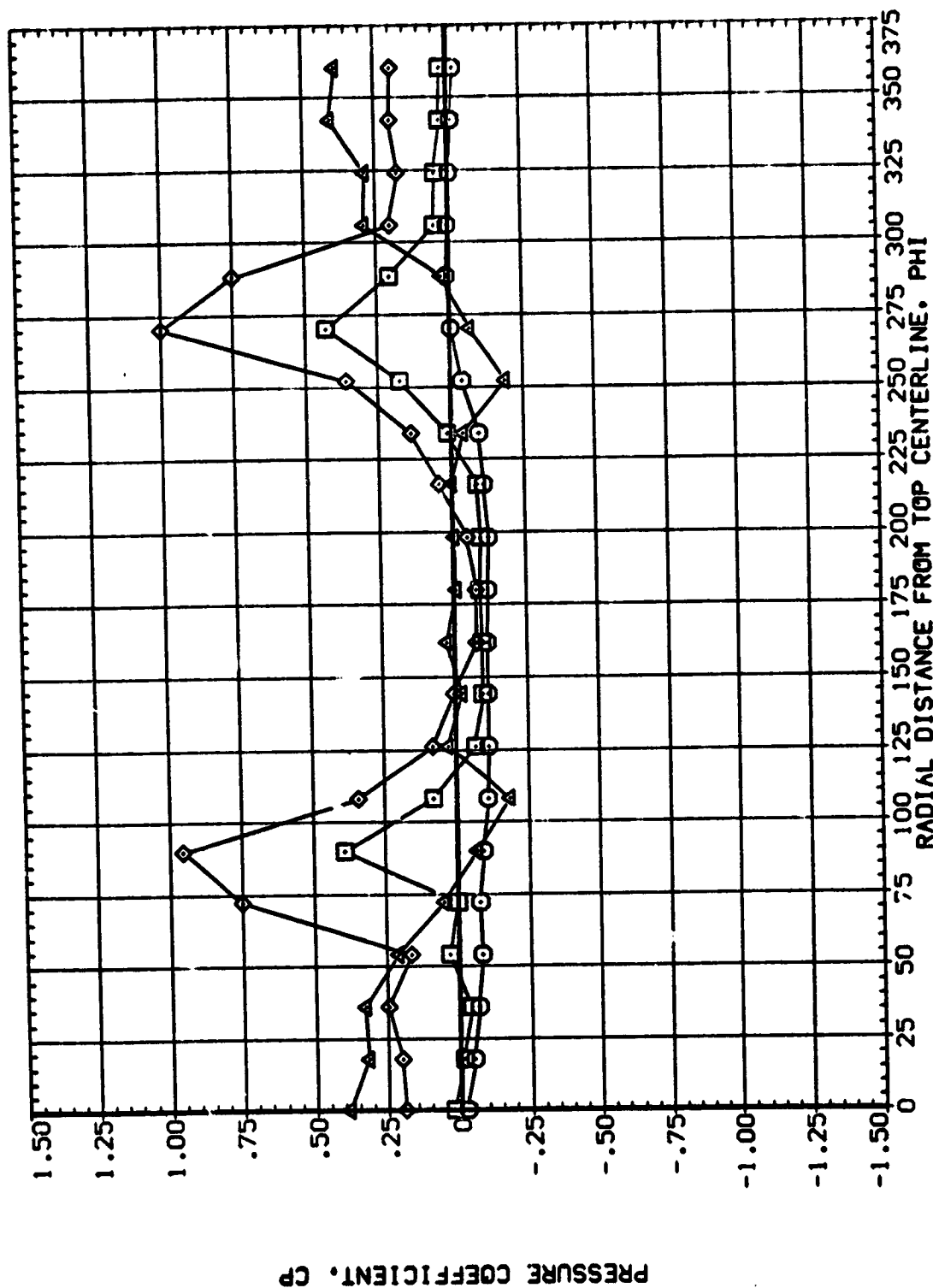
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 LREF 5.313  
 BREF 5.313  
 YMRP 2.549  
 ZMRP .000

SD, IN.  
 IN.  
 IN.  
 IN.  
 IN.

PARAMETRIC VALUES  
 -5.000  
 .140  
 .000

CONF16  
 RUDDER  
 DRG11C

90.000  
 .000  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
○  
□  
◇  
△

X/LT .438  
.506  
.573  
.641

BETA 4.000

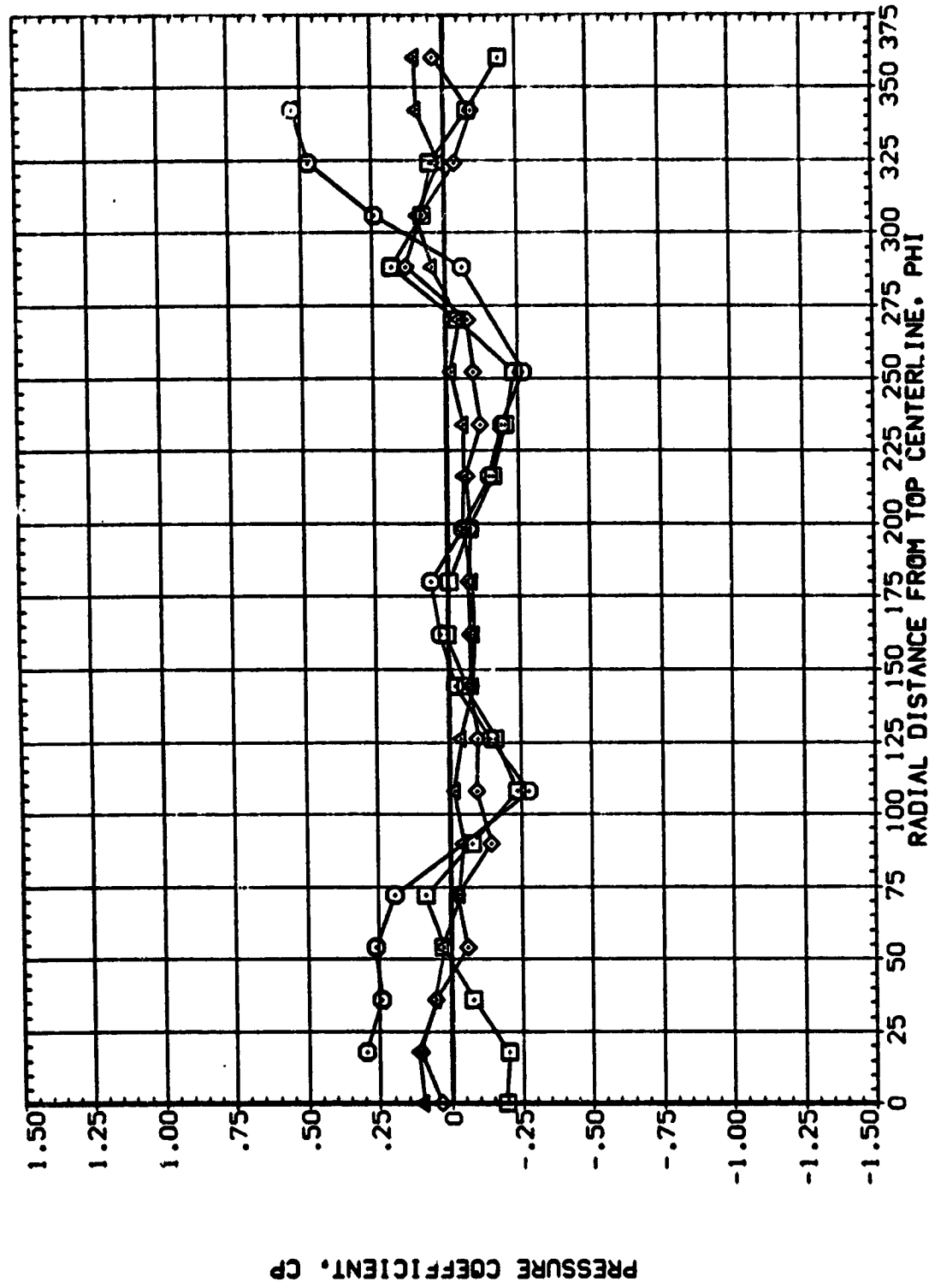
MACH 1.960

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

50. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

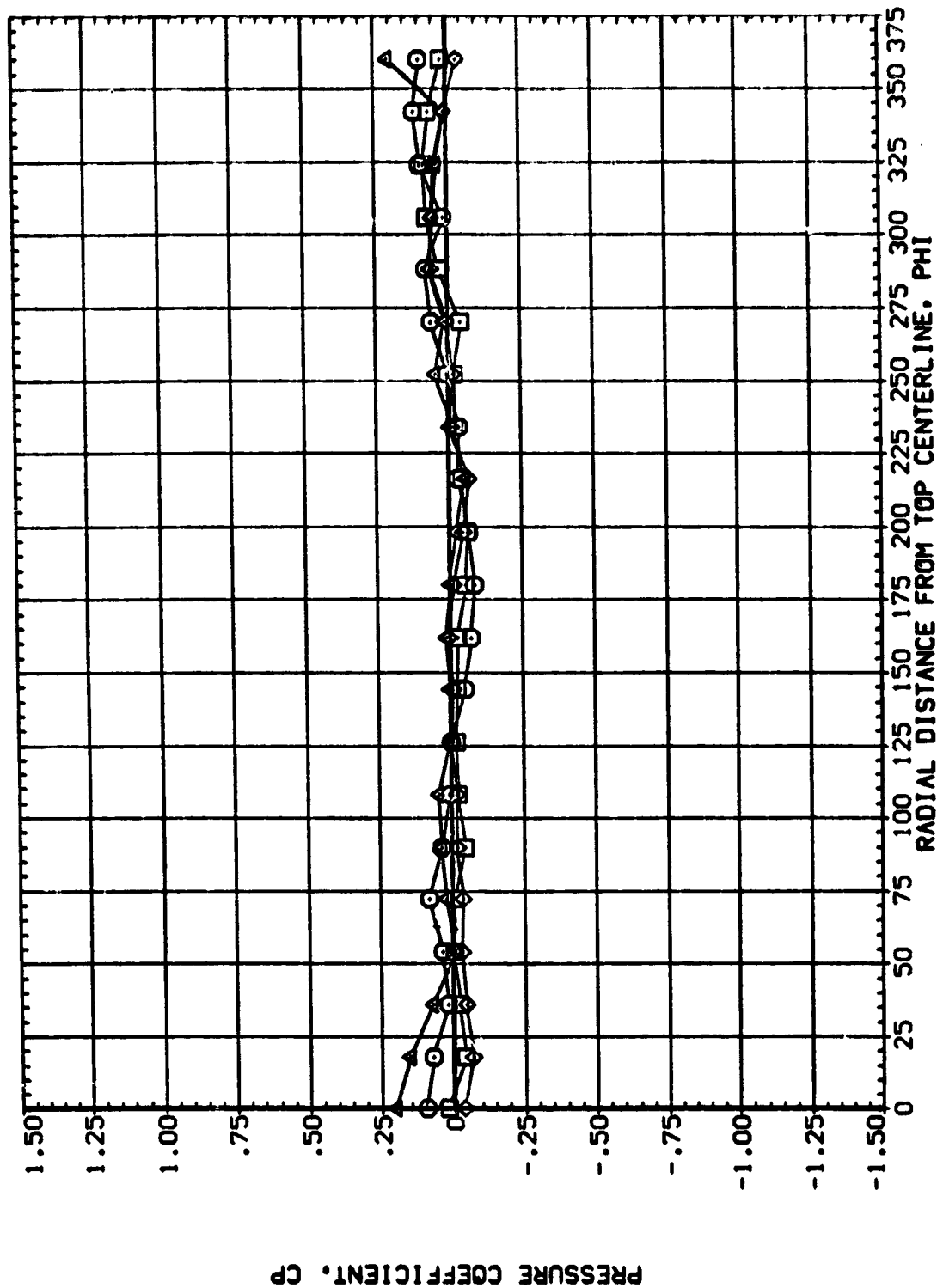
PARAMETRIC VALUES  
-5.000 CONF 16  
.140 RUDDER  
.000 ORB INC  
90.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT		BETA	MACH	REFERENCE DATA							PARAMETRIC VALUES						
	.708	.776			.844	.912	SREF	LREF	BREF	XREF	ZREF	50 IN.	IN.	IN.	IN.	IN.	IN.	IN.
○			4.000	1.960						6.198	5.313	5.313	2.549	.000	.140	.000	.000	90.000
□																		.000
◇																		.500
△																		

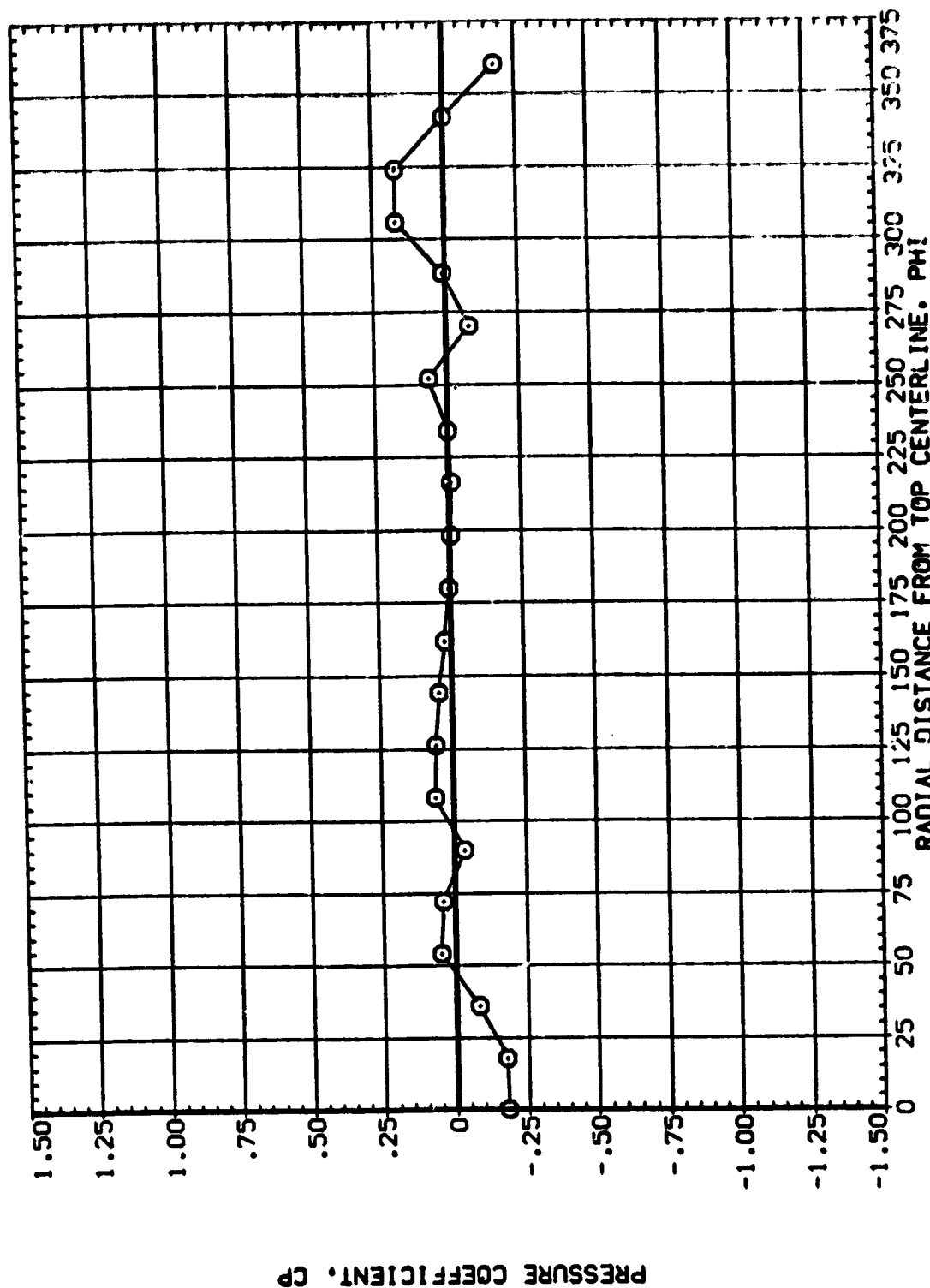


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82104)

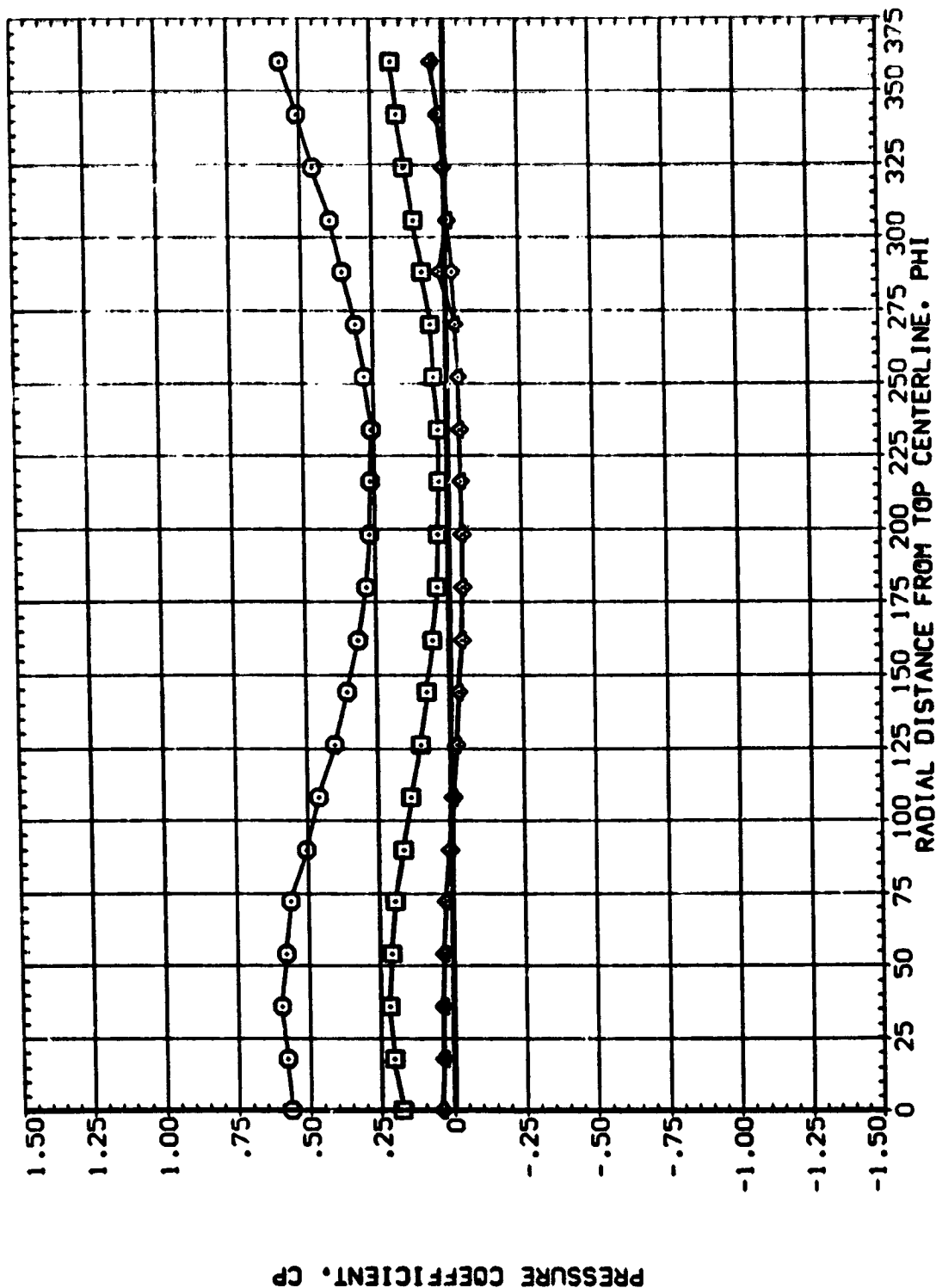
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	ALPHA	CONF 16	CONF 17	CONF 18
0	.984	4.000	1.960	6.198	5.313	5.313	2.549	DELTA Z	.000	.000	.000
								X-SUB	.140	.000	.000
										.000	.000
											.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	-5.000	CONFIG	50.000	
○	.076	-4.000	3.480	6.198	5.313	5.313	2.549	.140	RUDER	.000	
□	.155							.000	ORBIT	.500	
◇	.220										
△	.235										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

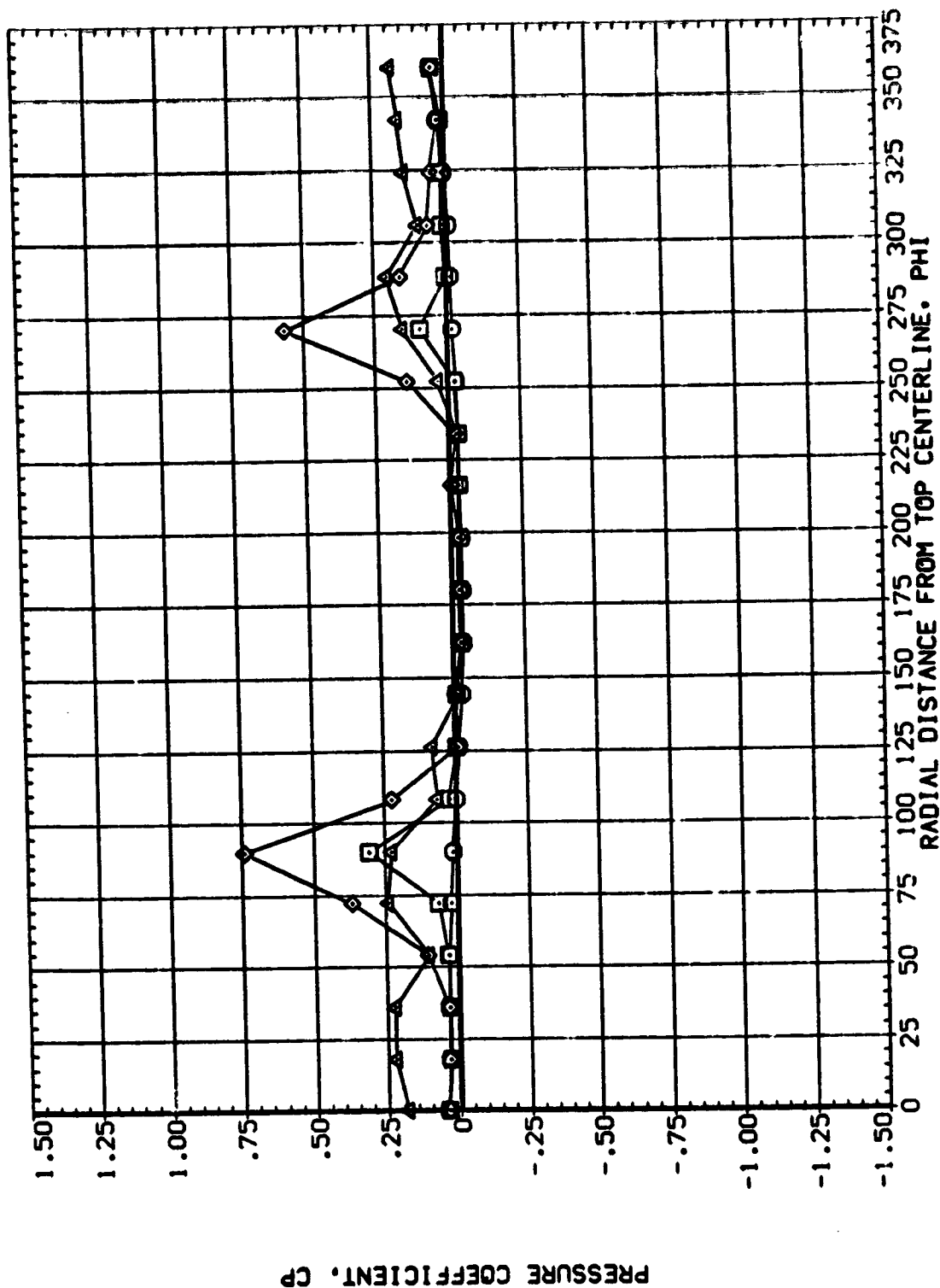
# MSFC 567(1A32F) T9 S3/2 S3/2 03      EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT    BETA    MACH  
 .271    -4.000    3.480  
 .314  
 .350  
 .382

REFERENCE DATA  
 SREF 6.198 50. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XMRP 2.549 IN.  
 YMRP .000 IN.  
 ZMRP .000 IN.

PARAMETRIC VALUES  
 -5.000 CONF IG 90.000  
 .140 RUDDER .000  
 .000 DRB INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
 ○  
 □  
 △

X/LT .438  
 .506  
 .573  
 .641

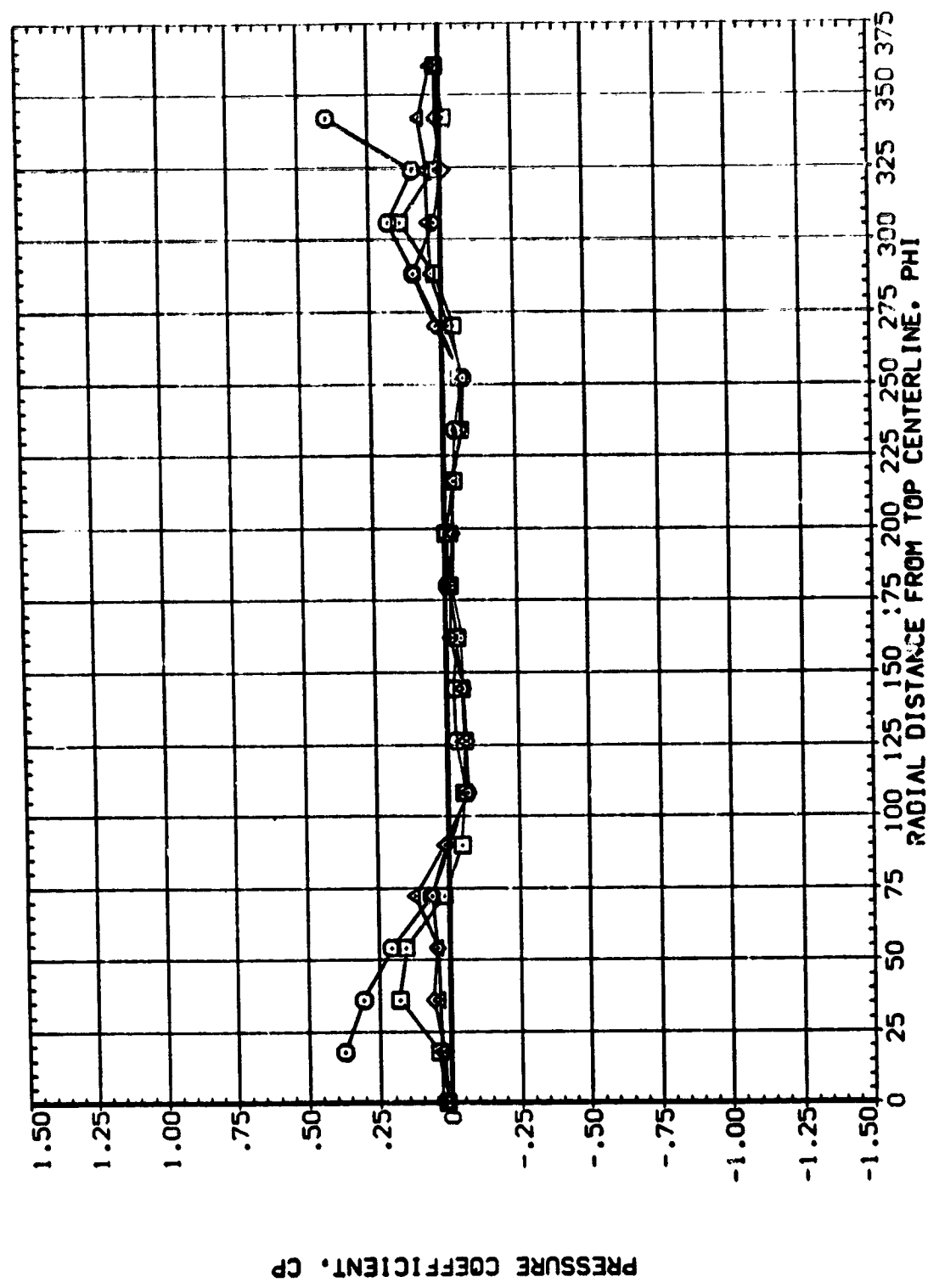
BETA -4.000

MACH 3.480

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SD. IN.  
 IN.  
 IN.  
 IN.

PARAMETRIC VALUES  
 -5.000 CONF1G 90.000  
 .140 RUDDER .000  
 .000 ORBINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL

X/LT

BETA

MACH

REFERENCE DATA

SD, IN.

ALPHA

PARAMETRIC VALUES

CONF 16

RUDDER

DRB INC

X-SRB

DELTA Z

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

IN.

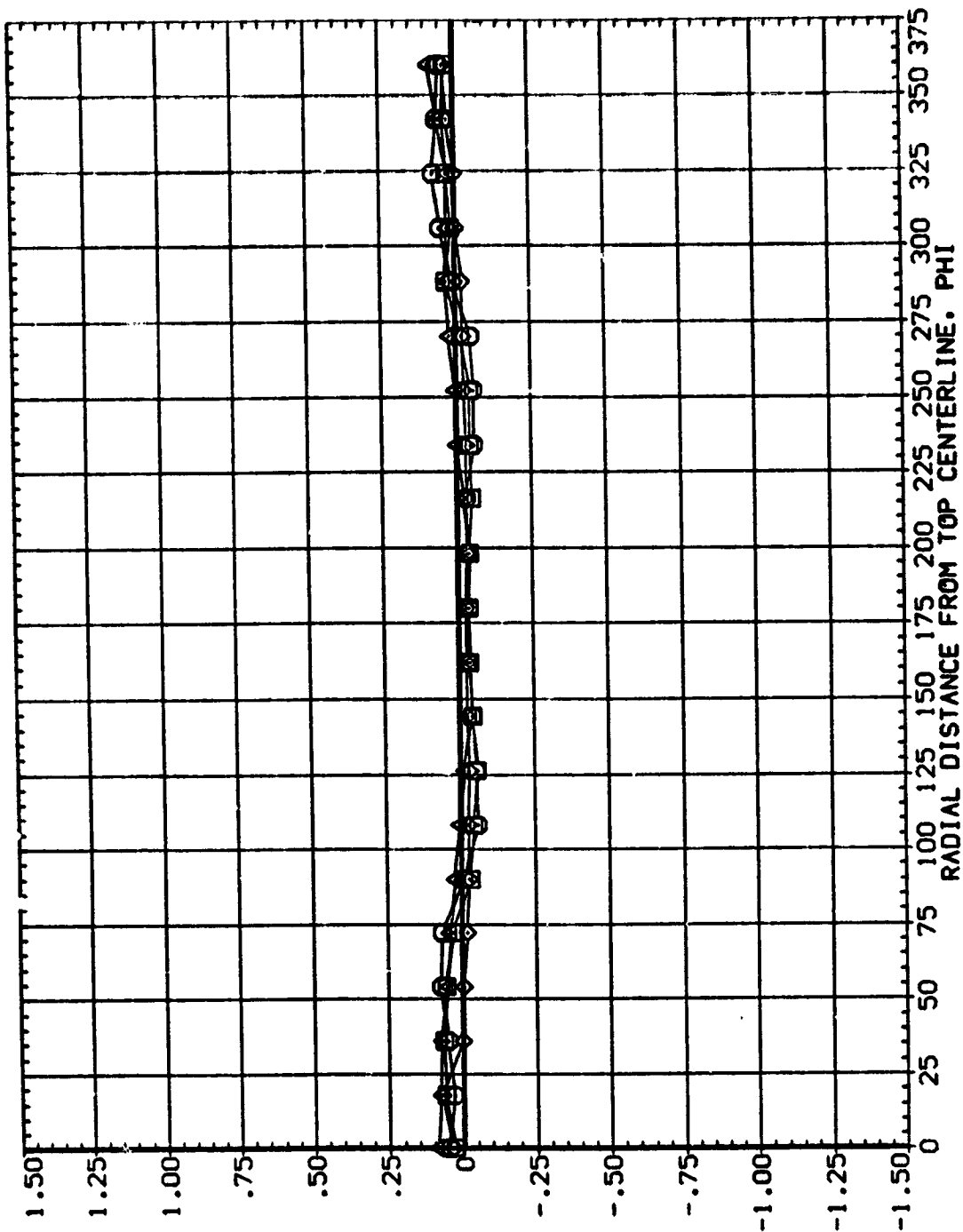
IN.

IN.

IN.

IN.

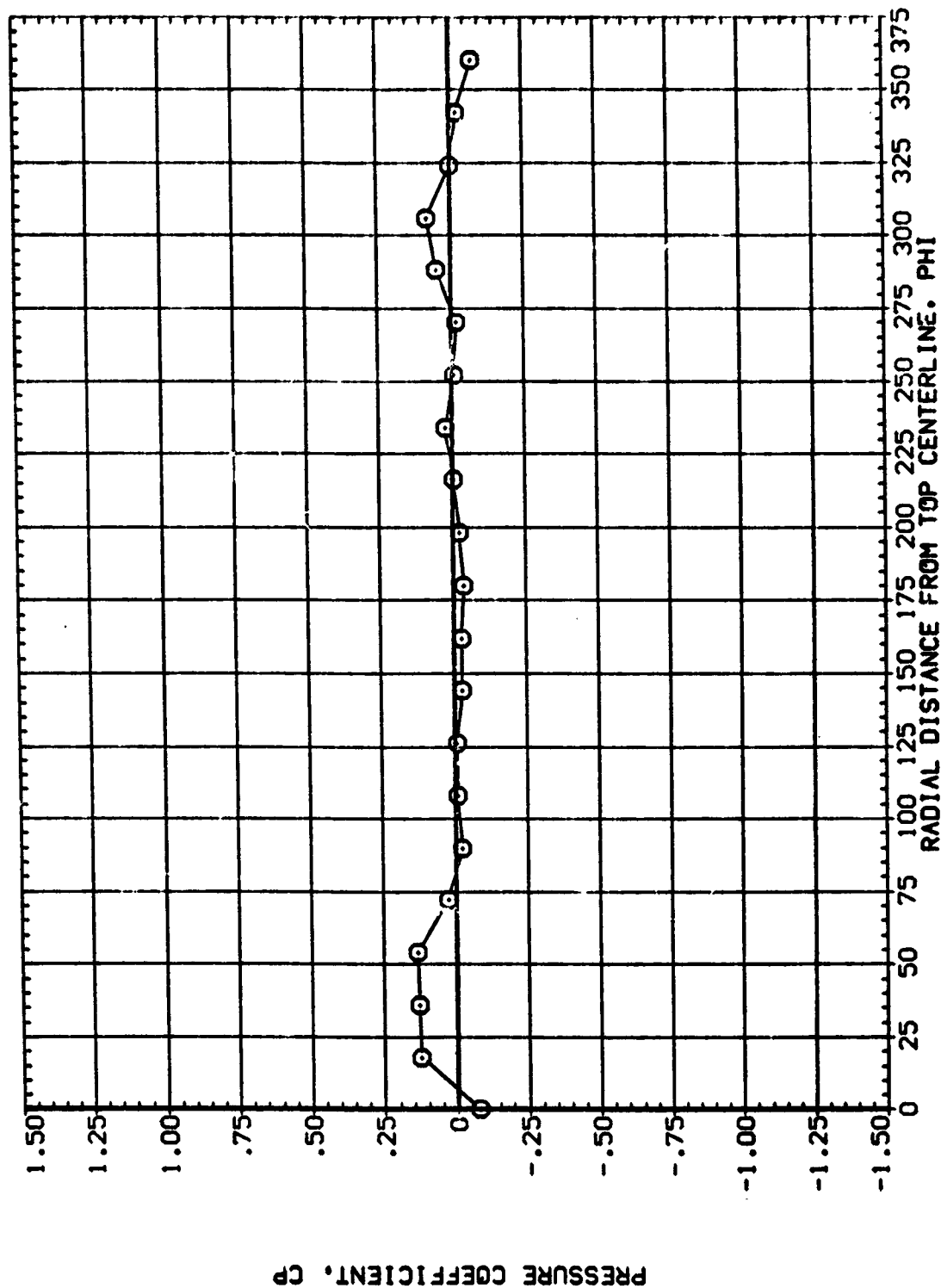
IN.



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SO.IN.	IN.	IN.
○	.584	-4.000	3.480	6.198	5.313	5.313	2.549	.000	.000	.000	.500
									ALPHA	DELTAZ	X-SRB
									-5.000	.140	.000
									CONF IG	RUDER	ORBIT INC
									90.000	.000	.500

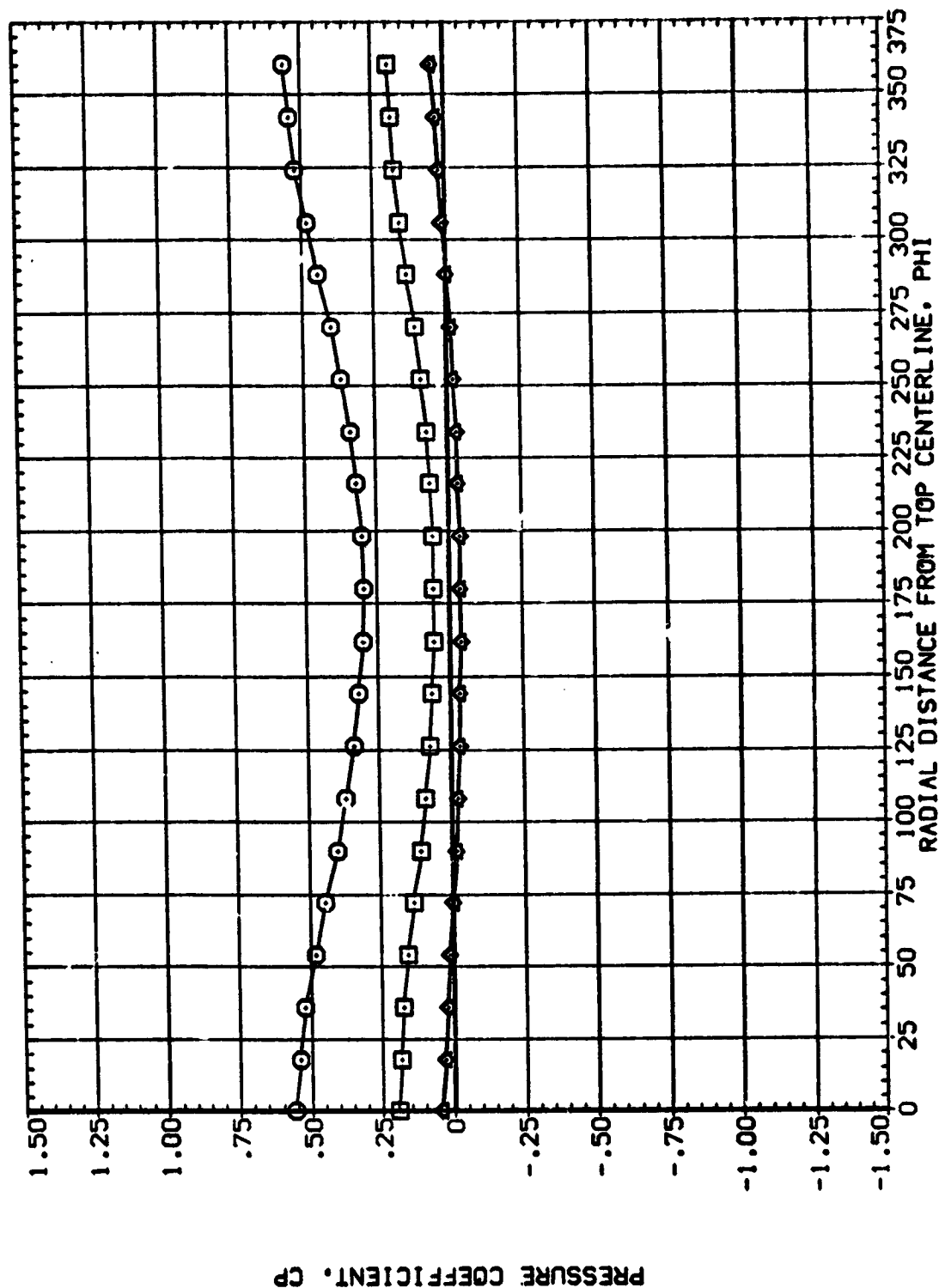


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

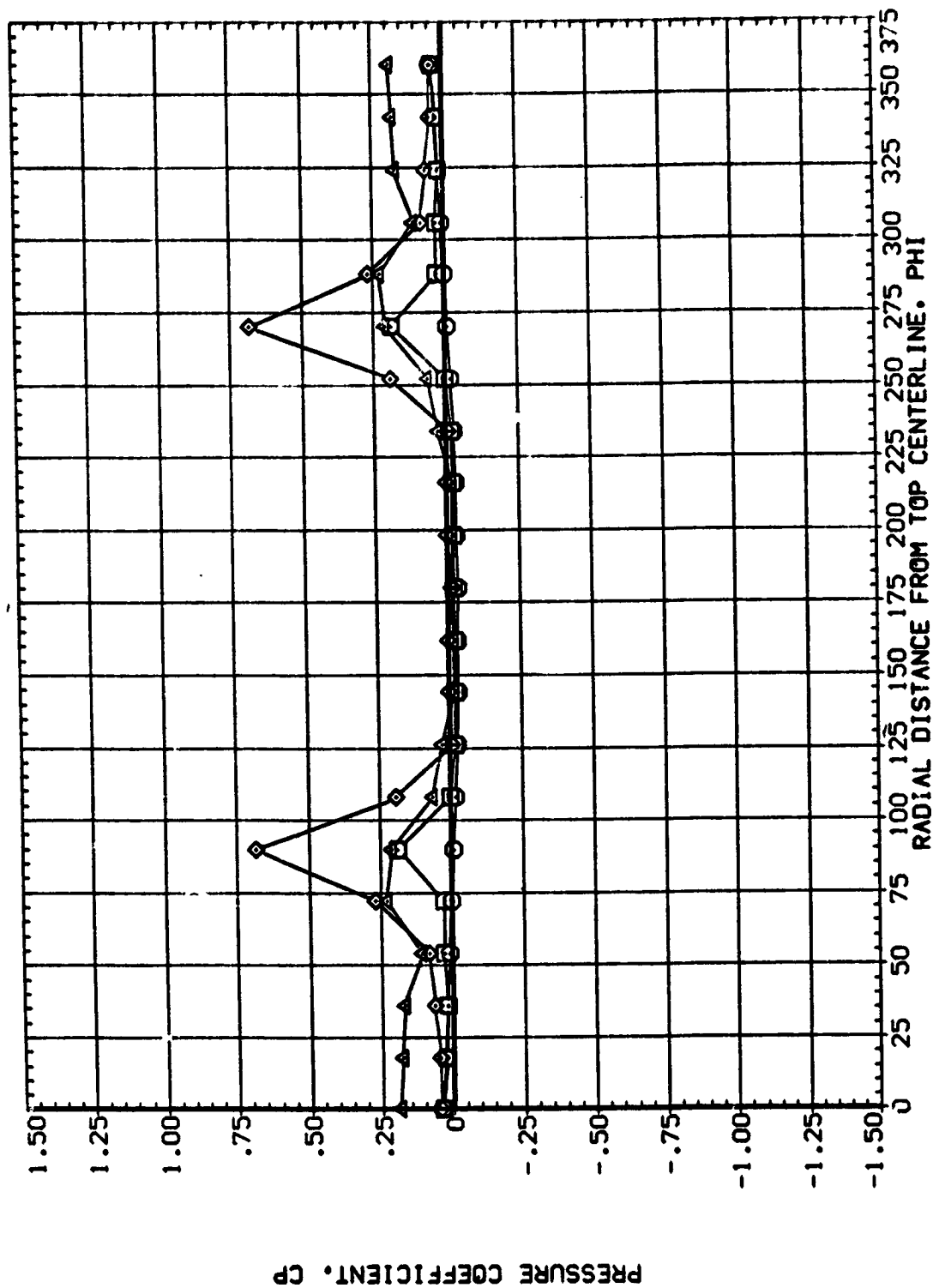
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X/LT	LREF	5.313	DELTA Z	.000
BETA	BREF	5.313	DELTA Z	.000
MACH	XRRP	2.549	ORIGIN	.500
.076	YRRP	.000		
.155	ZRRP	.000		
.220				
.235				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	YMRP	ZMRP	ALPHA	DELTA Z
○	.271	.000	3.480	6.198	5.313	5.313	2.549	.000	.000	50.000	CONF IG
□	.314									.140	RUDER
◇	.350									.000	ORB IN
△	.382									.500	

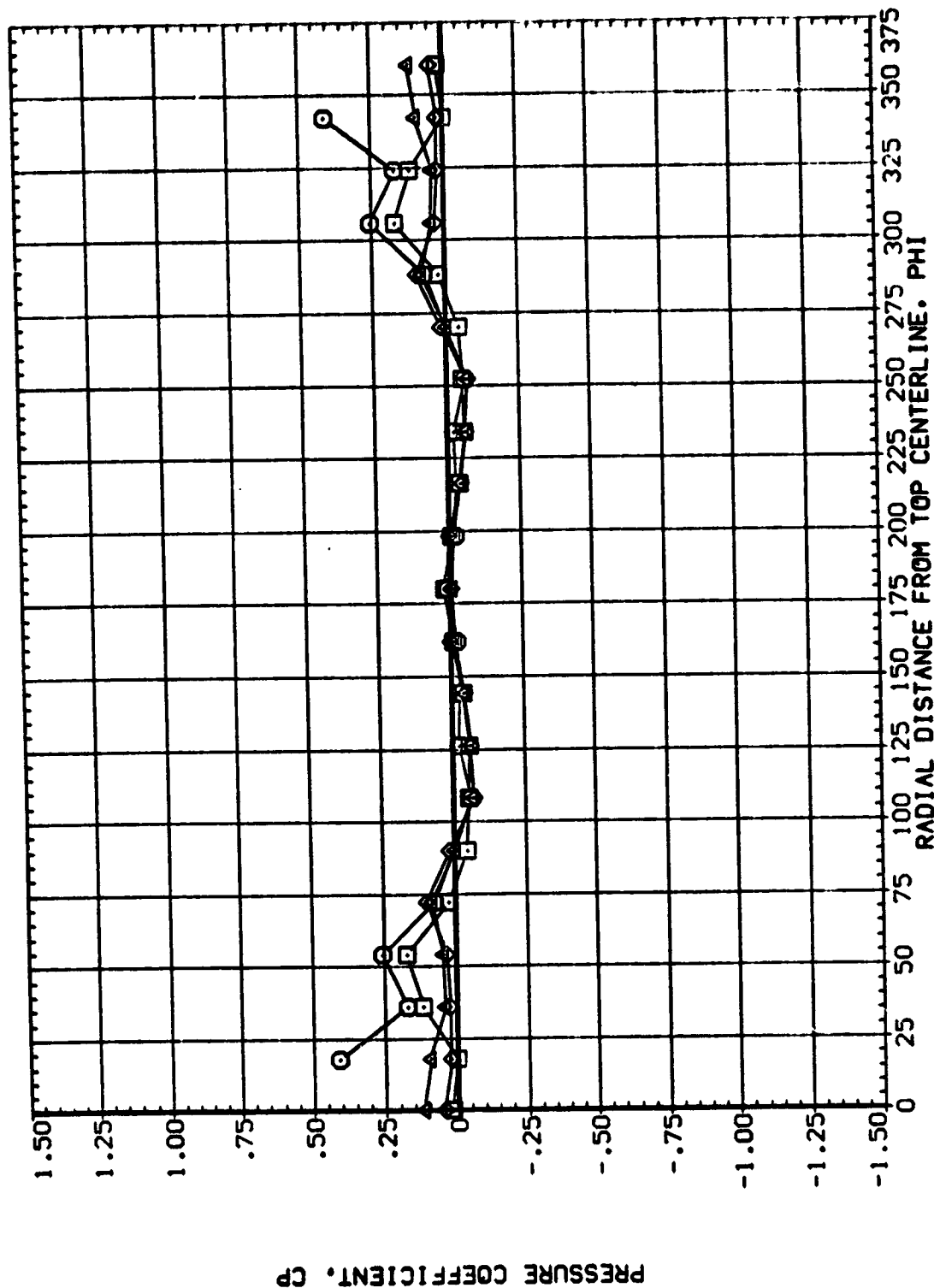


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



# MSFC 567(1A32F) T9 S3/2 S3/2 03      EXTERNAL TANK (A82T04)

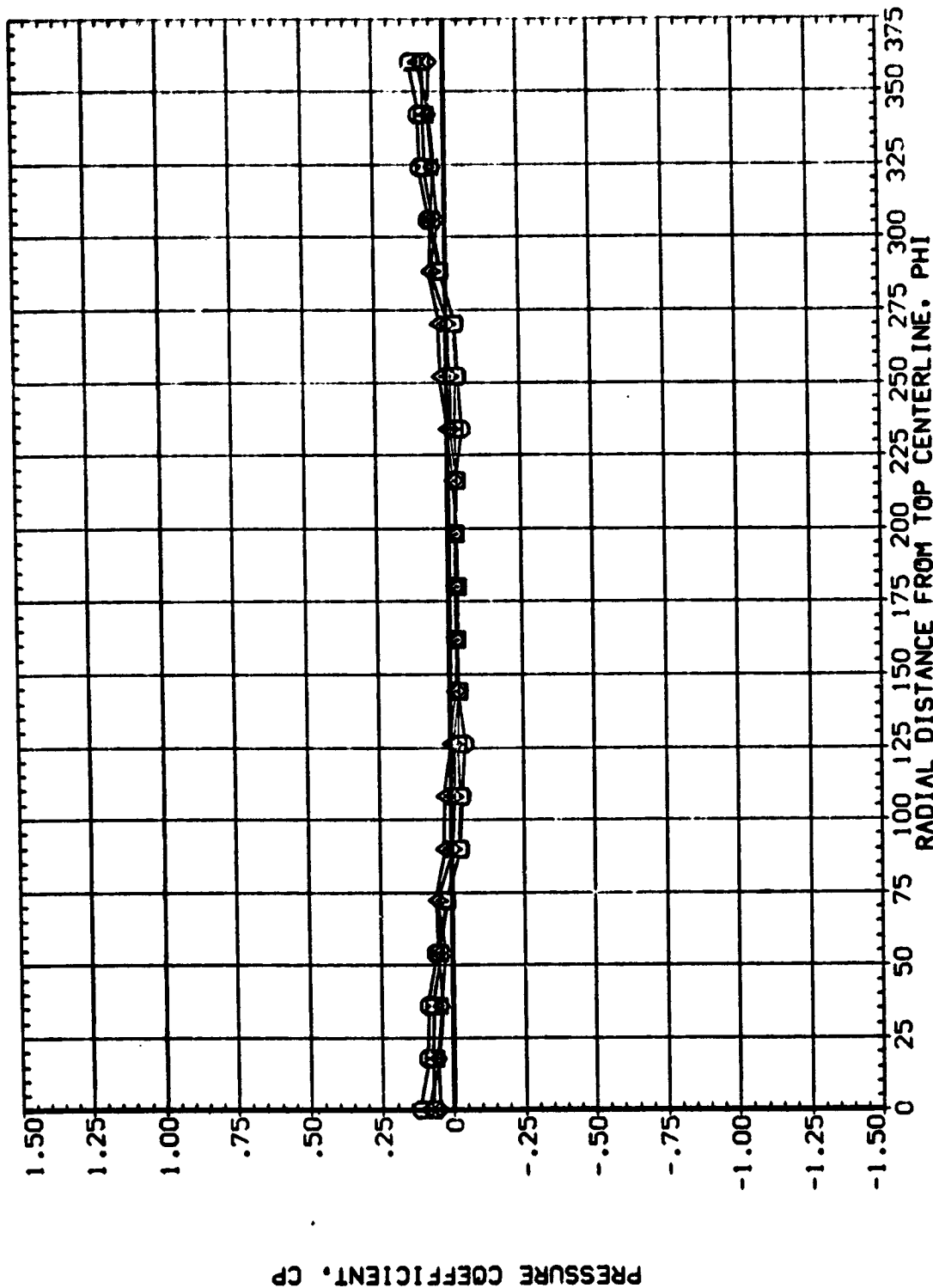
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				SREF	LREF	BREF	XMRP	50. IN.	IN.	IN.	IN.
○	.438	.000	3.480	6.198	5.313	5.313	2.549	.000	.000	.000	.000
◇	.506							.140	.000	.000	.000
△	.573							.000	.000	.000	.500
▽	.641							.000	.000	.000	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	K/LT	BETA	MACH	REFERENCE DATA			PARAMETRIC VALUES		
				SREF	UREF	50. IN.	ALPHA	CONF	CONF
○	.708	.000	3.480	6.198	5.313	IN.	DELTA Z	.140	RUDER
□	.776			5.313	2.549	IN.	X-SRB	.000	ORBIT
◇	.844			2.549	.000	IN.			
△	.912			.000	.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03



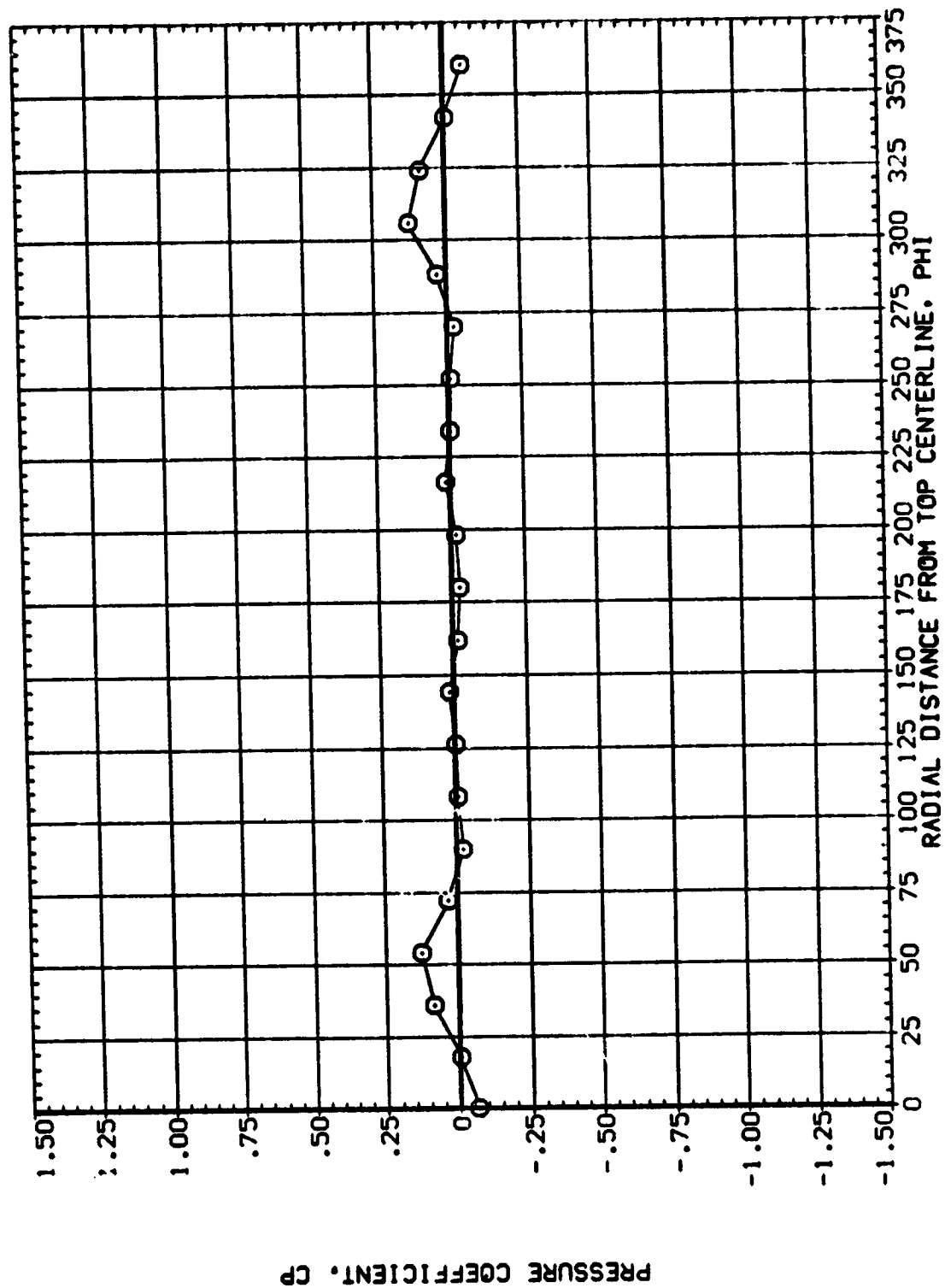
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
O

X/LT .984 BETA .000 MACH 3.480

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP .000  
ZPRP .000

PARAMETRIC VALUES  
-5.000 CONF16 90.000  
.140 RUDDER .000  
.000 ORBINE .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL

X/LT  
.076  
.195  
.220  
.235

BETA  
4.000  
3.480

MACH  
3.480

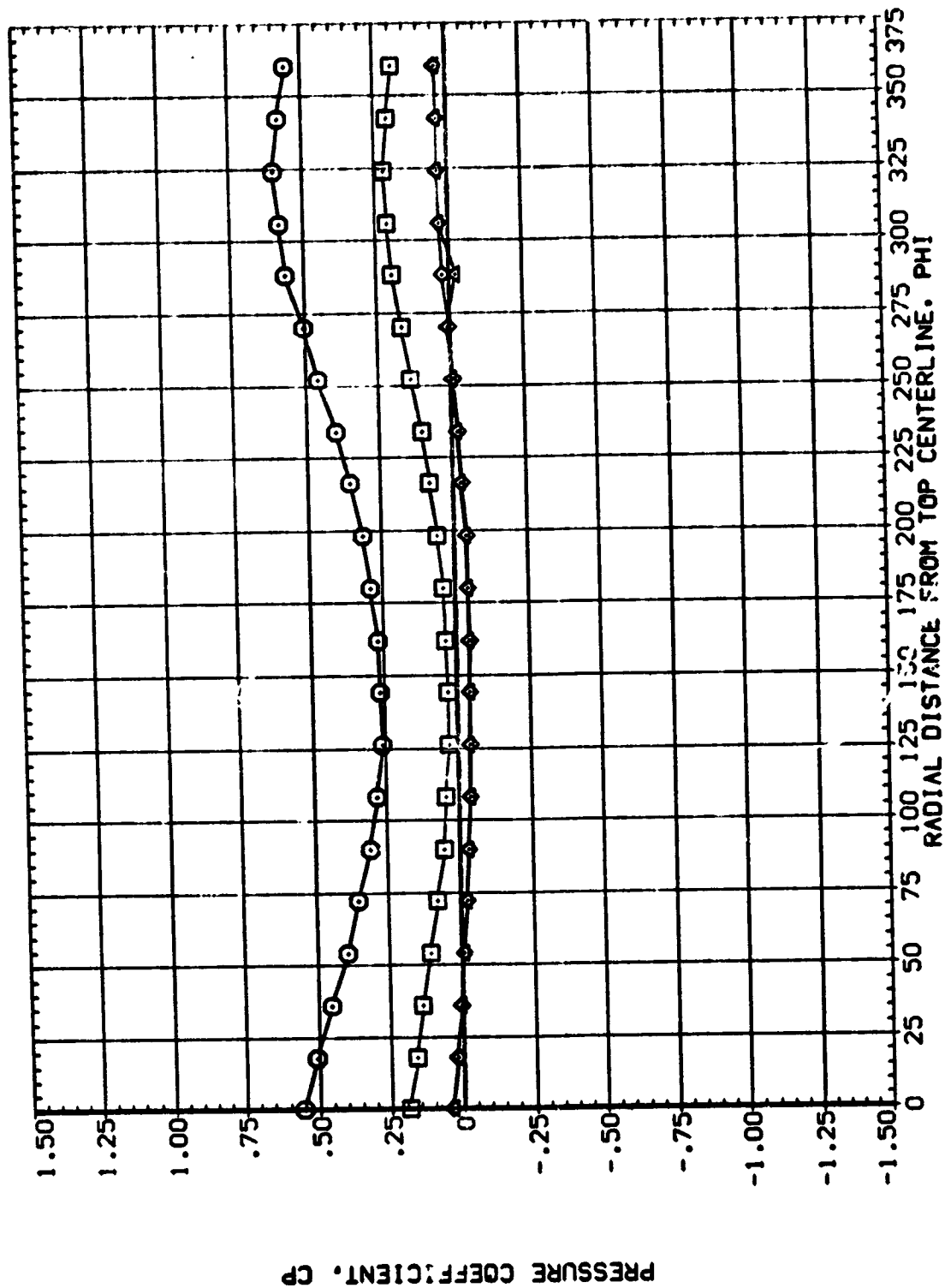
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SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SO. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
-5.000 CONFIG  
.140 RUDDER  
.000 ORBINC

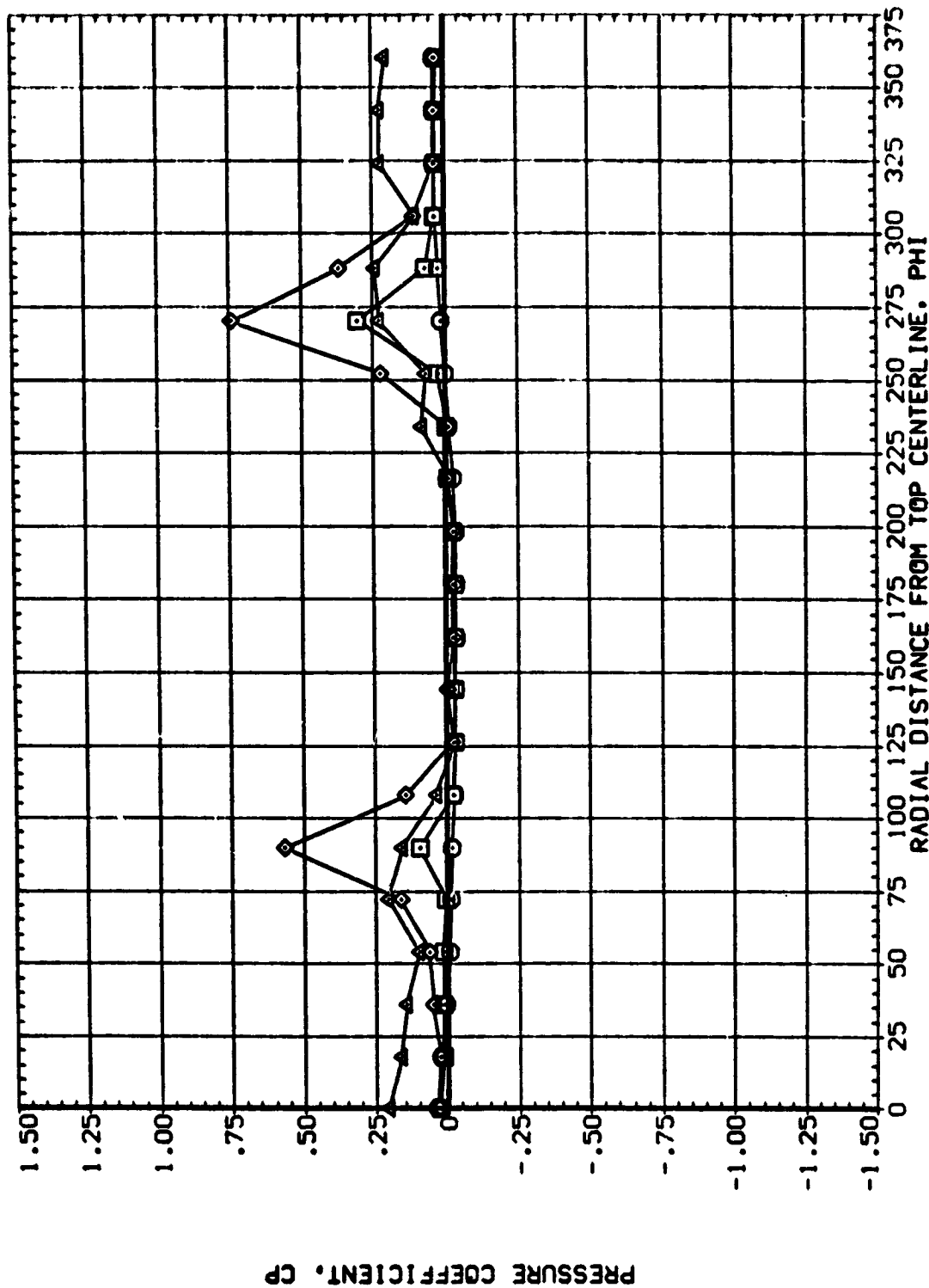
50.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK(A82T04)

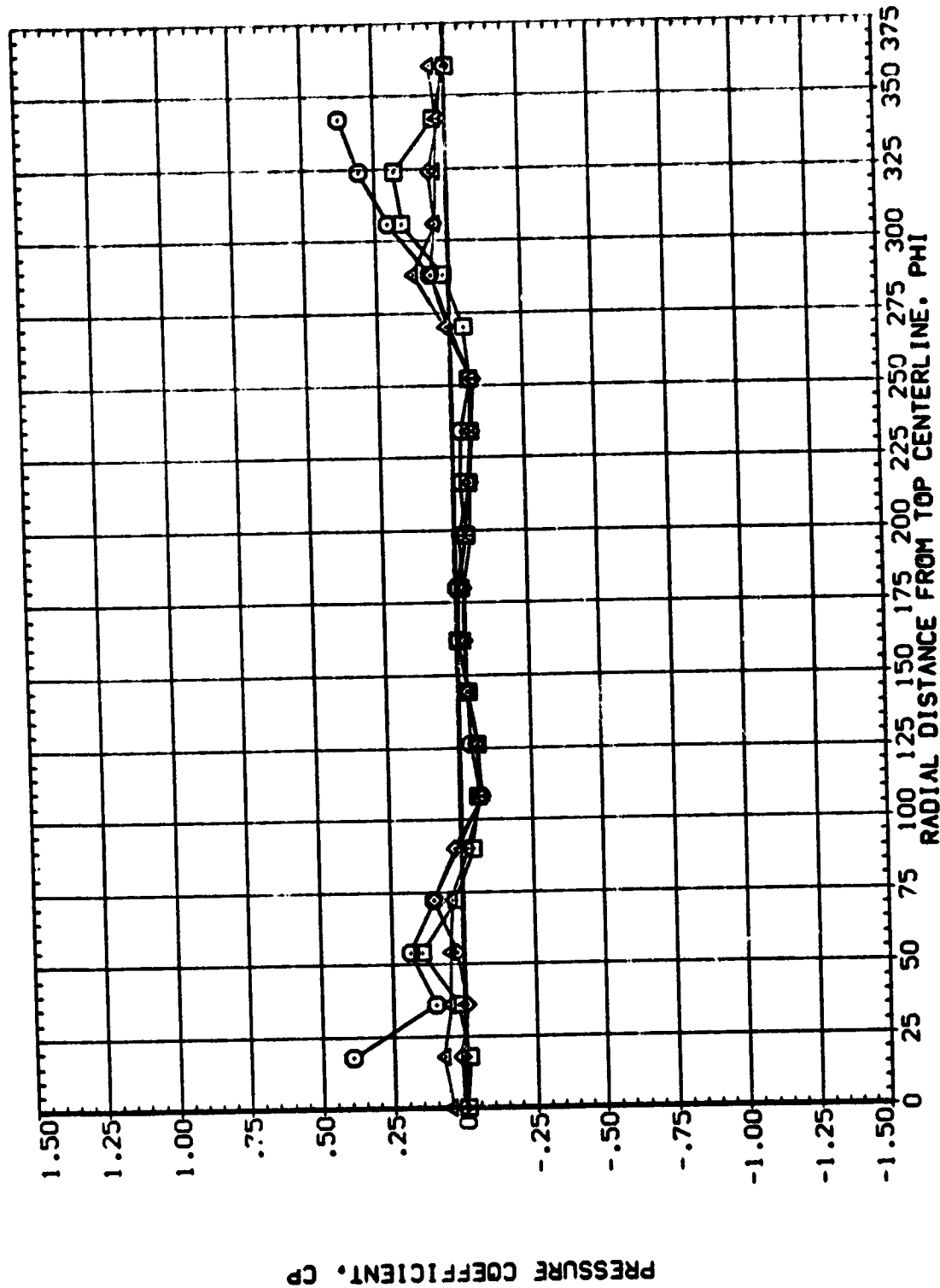
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	SD. IN.	ALPHA	CONFIG		
□	.271	4.000	3.480	5.198	IN.	DELTAZ	RUDER		90.000
◇	.314			5.313	IN.	X-SUB	.140		.000
△	.350			2.549	IN.		.000		.500
	.362			.000	IN.				
				ZREF					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

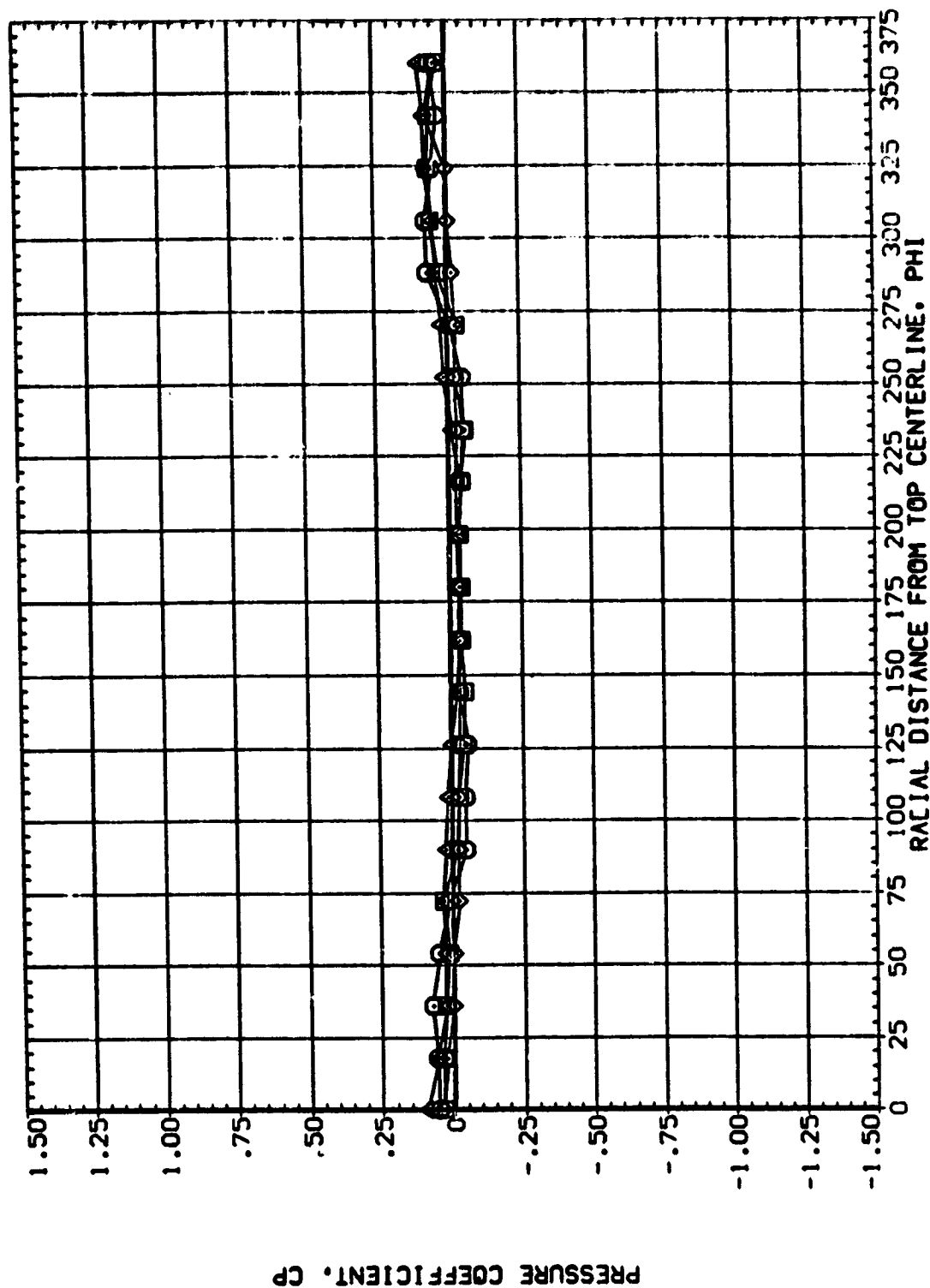
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	SD. IN.	ALPHA	CONF16	CONF16
○	.438	4.000	3.480	5.198	5.313	5.313	2.549	IN.	DELTAZ	.140	RUCORR
□	.506							IN.	X-SRB	.000	ORBNIC
△	.573							IN.			
◇	.641							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

# MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.708	4.000	3.480	SREF 5.198	-5.000
□	.776			LREF 5.313	.140
◇	.844			BREF 5.313	.000
△	.912			XREF 2.549	.500
				YREF .000	
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03

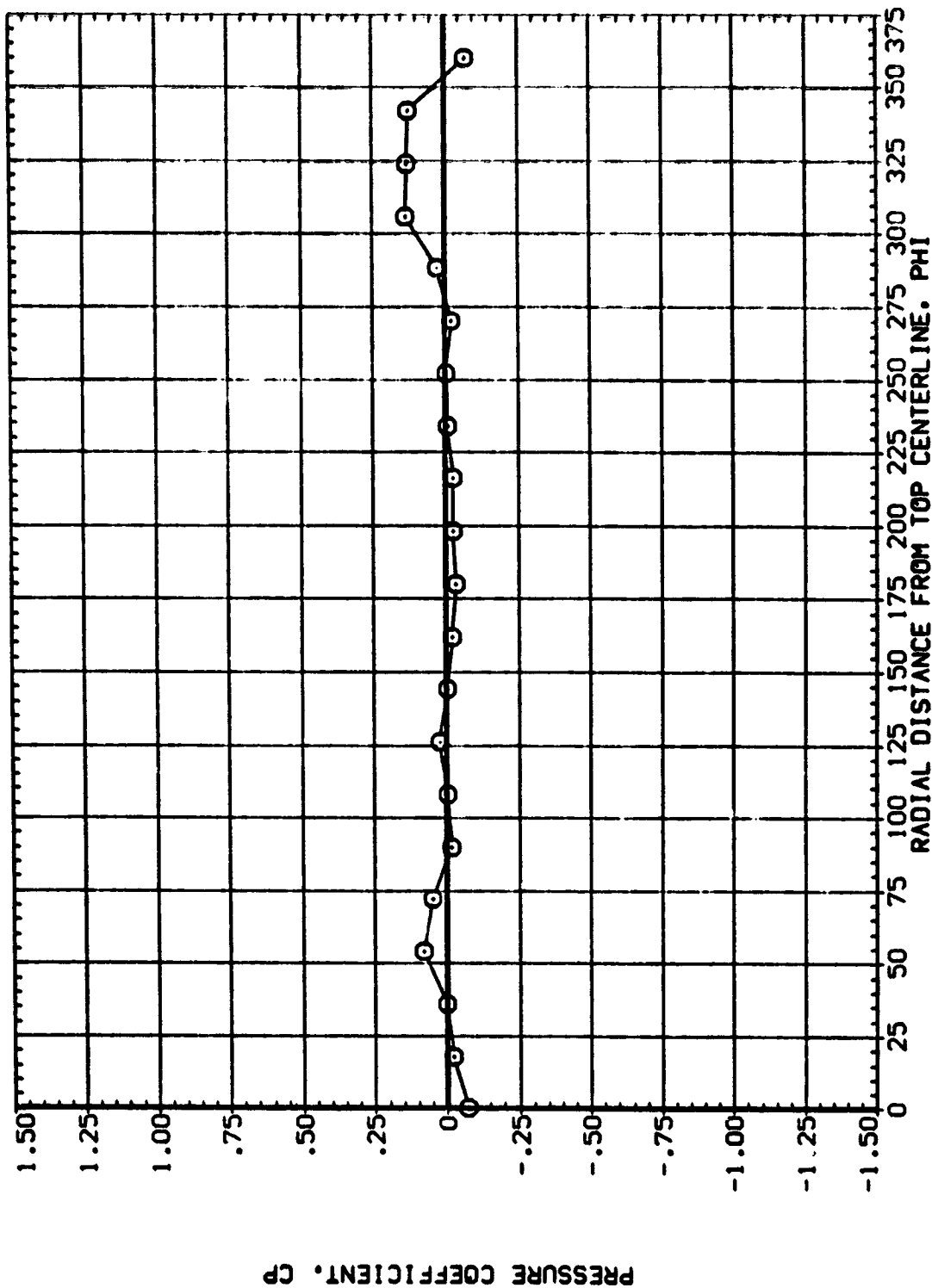
MSFC 567(1A32F) T9 S3/2 S3/2 03 EXTERNAL TANK (A82T04)

SYMBOL  
O

X/LT .994 BETA 4.000 MACH 3.480

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP .000  
ZPRP .000

PARAMETRIC VALUES  
ALPHA -5.000  
DELTAZ .140  
X-SRB .000  
RUDDER .000  
ORBITAL .500



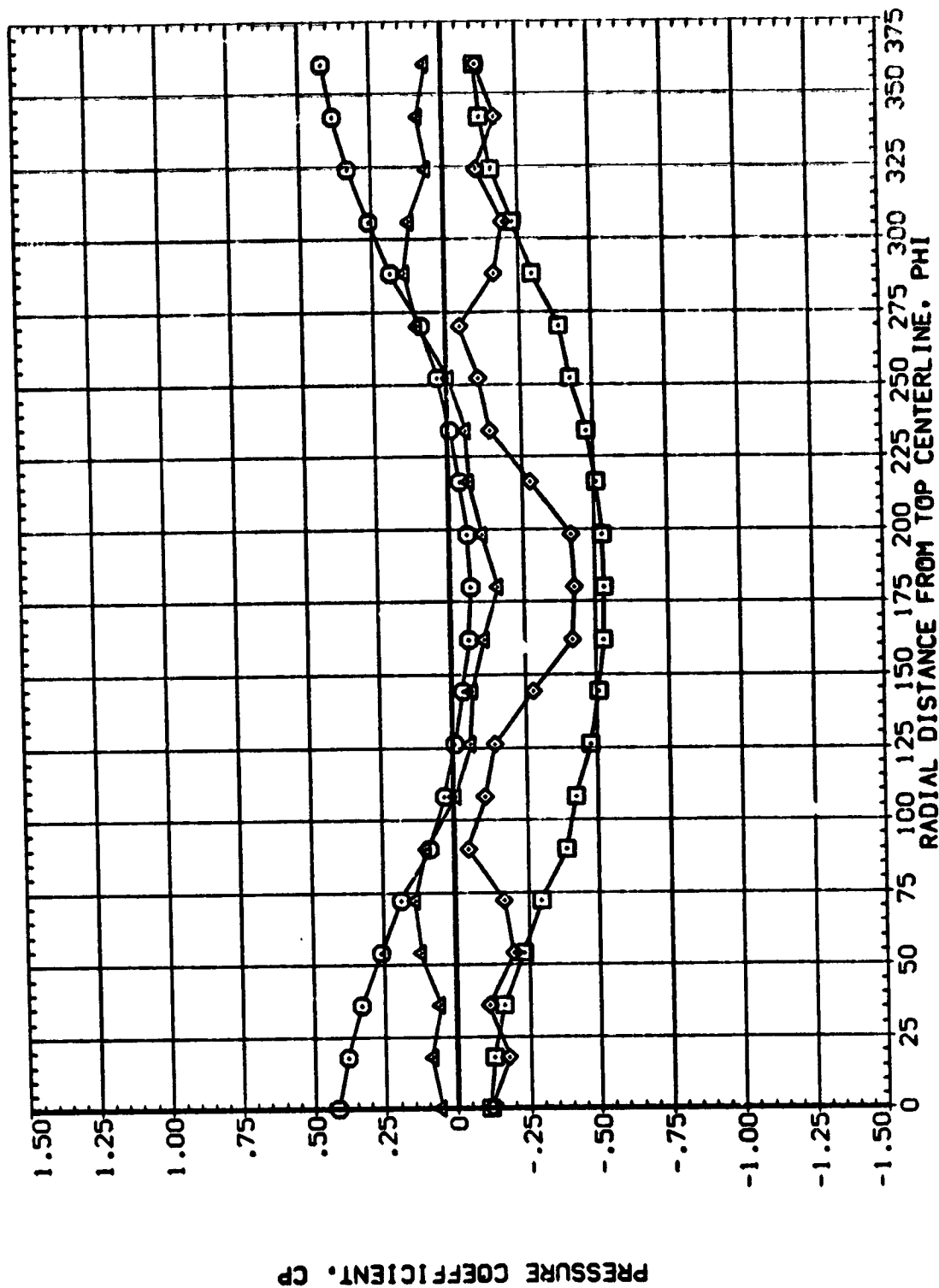
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03





# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	.076	.155	.220	.235	-8.000	.900	SREF	LREF	BREF	ZMRP	.000	.140	.000	.500
○							6.198	5.313	5.313	.000	BETA	CONFIS	RJDDER	DBBINC
◇							5.313	2.549	.000	IN.	DELTAZ			
△							.000	.000	.000	IN.	X-SRB			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL X/LT ALPHA MACH

○ .271 -8.000 .900

□ .314

◇ .350

△ .382

REFERENCE DATA

SREF 6.198 SO. IN.

LREF 5.313 IN.

BREF 5.313 IN.

YMRP 2.549 IN.

ZMRP .000 IN.

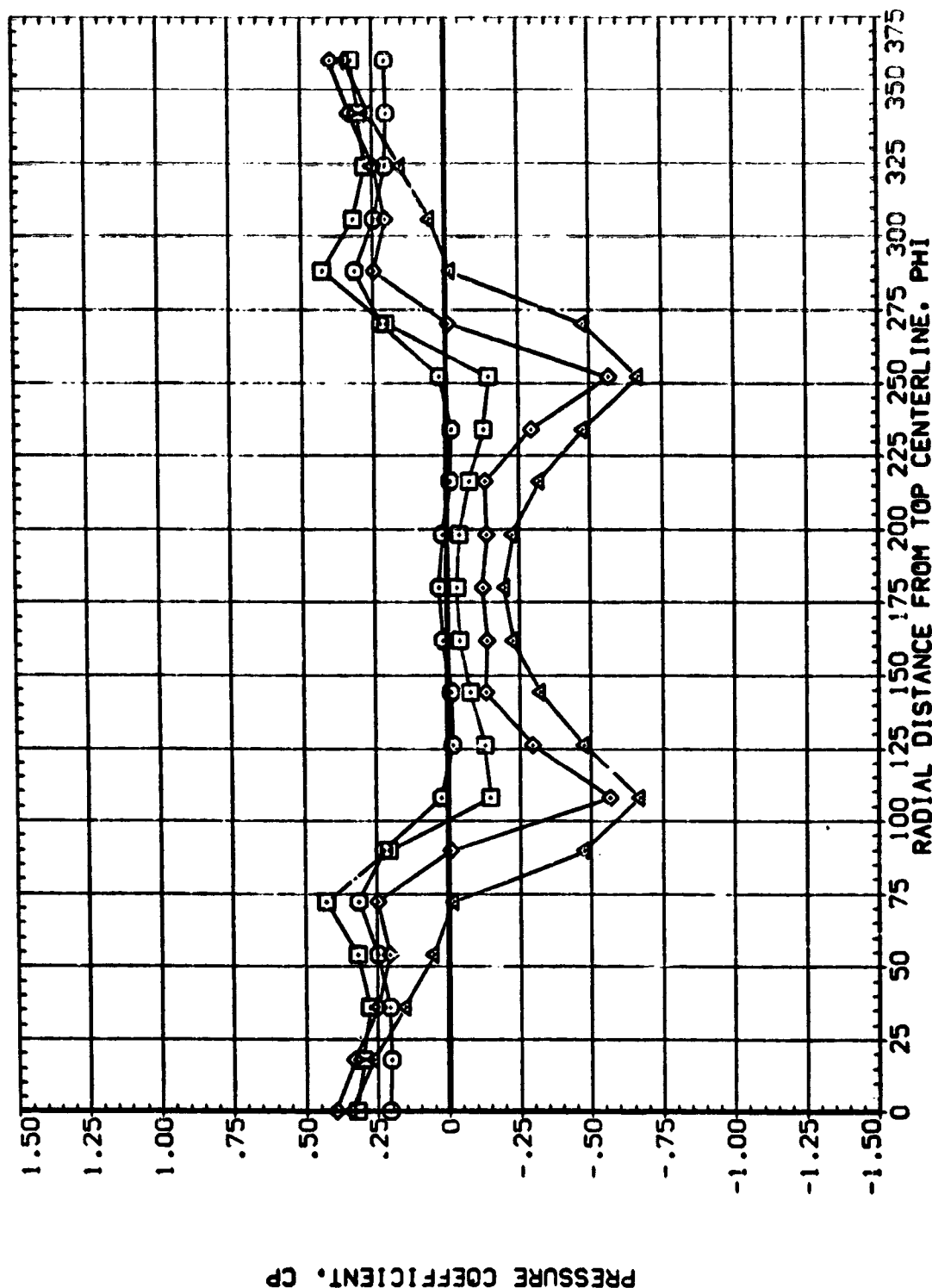
ZMRP .000 IN.

BETA DELTAZ X-SRB

.000 .140 .000

CONFIS RLODER ORBINC

.000 .000 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 ◇  
 △

X/LT .438  
 .506  
 .573  
 .641

ALPHA -8.000

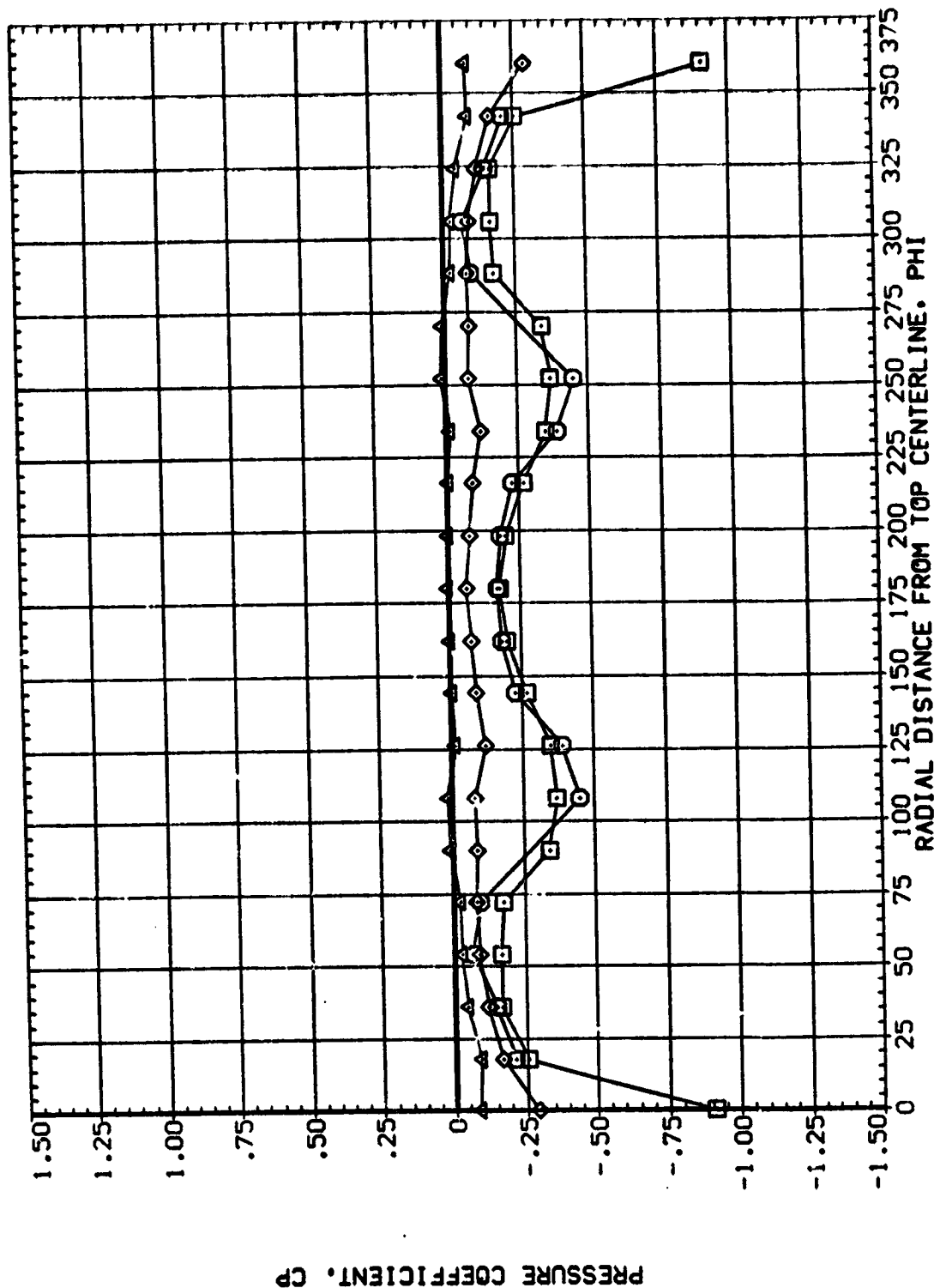
MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 3.313  
 BREF 3.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 .000  
 .140  
 .000  
 .000  
 .000  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

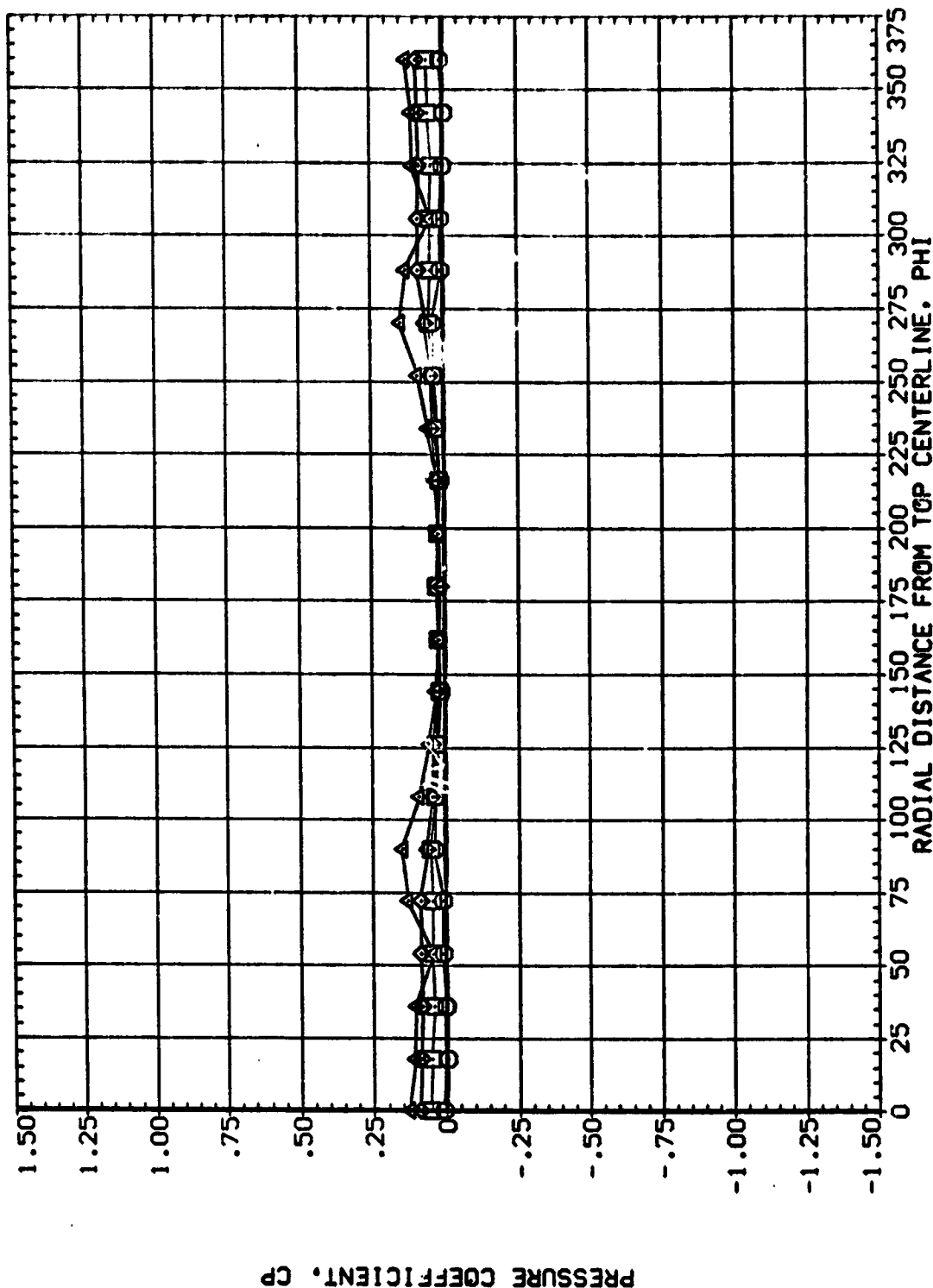
SYMBOL  
☐ ☐ ☐ ☐

X/LT ALPHA MACH  
 .708 -8.000 .900  
 .776  
 .844  
 .912

REFERENCE DATA  
 SREF 6.198 SQ. IN.  
 LREF 5.313 IN.  
 BREF 5.313 IN.  
 XMRP 2.549 IN.  
 YMRP .000 IN.  
 ZMRP .000 IN.

PARAMETRIC VALUES  
 .000 CONF IG 90.000  
 .140 RUDDER .000  
 .000 ORB INC .500

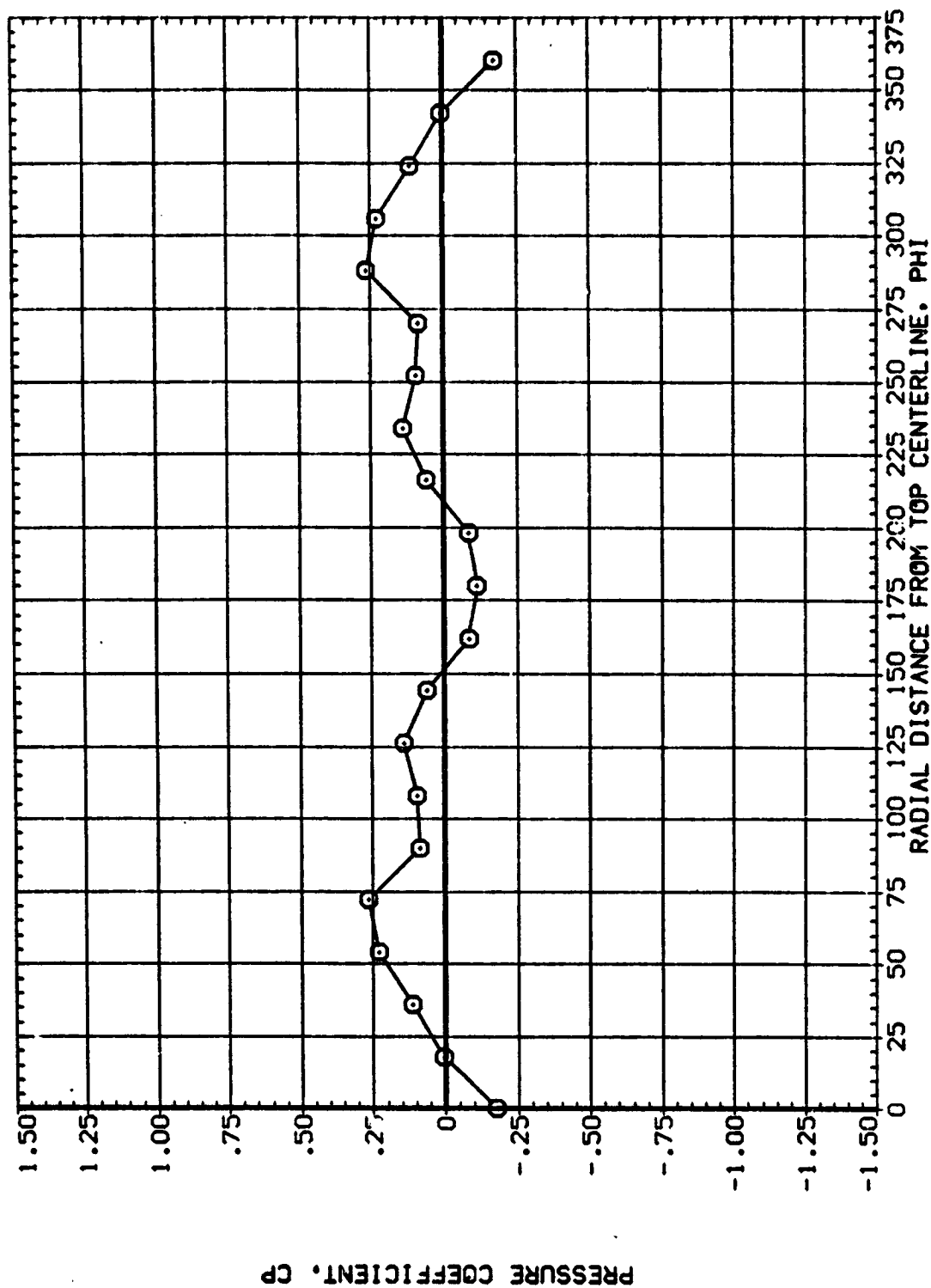
BETA  
 DELTA Z  
 X-SRB



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA						PARAMETRIC VALUES			
				SREF	LREF	BREF	XTRP	YTRP	ZTRP	BETA	DELTAZ	X-SRB	ORBIT
0	.984	-8.000	.900	6.198	5.313	5.313	2.549	.000	.000	.000	.140	.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

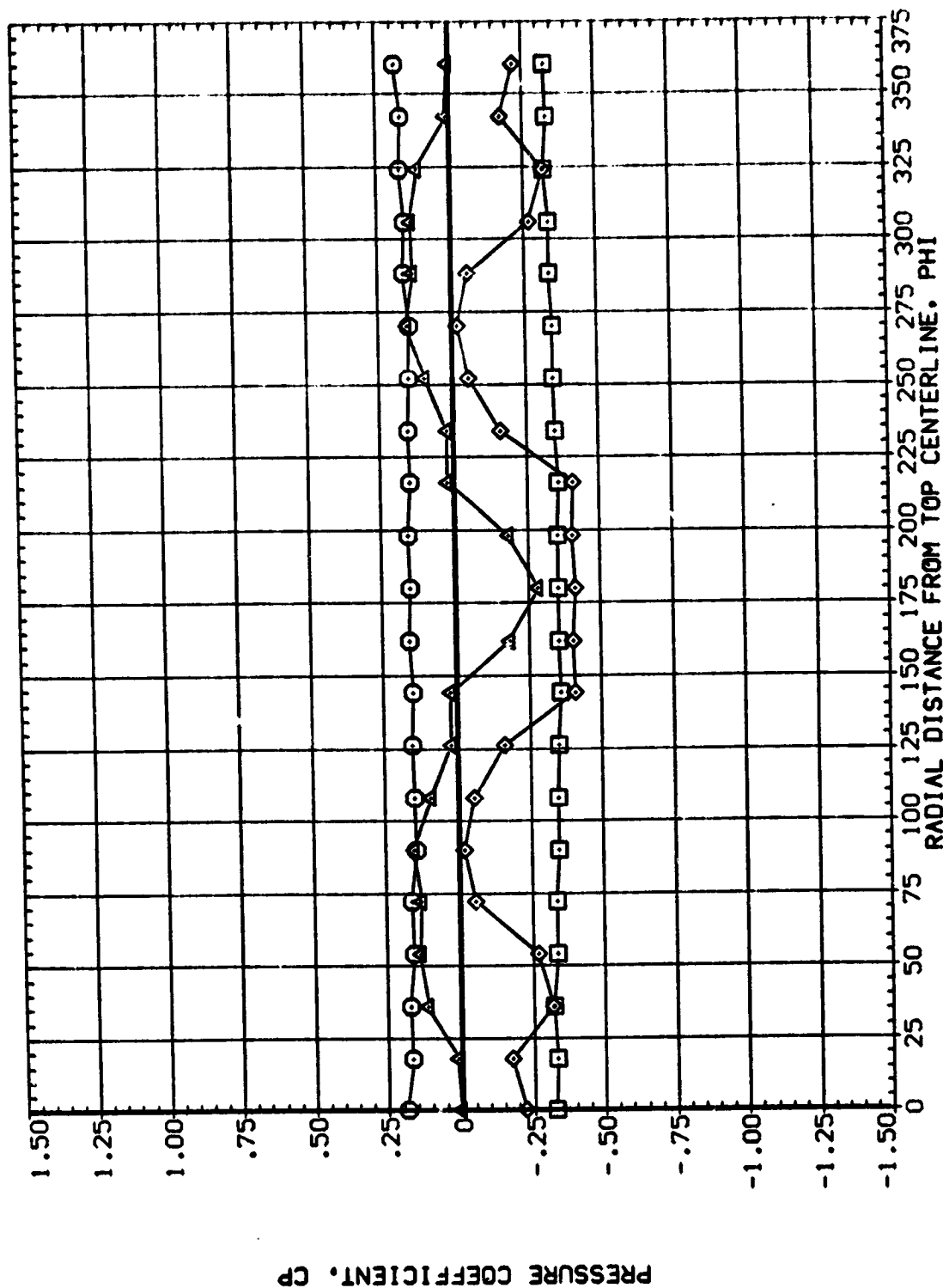
# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 □  
 △

X/LT ALPHA MACH  
 .076 .000 .900  
 .155  
 .220  
 .235

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

PARAMETRIC VALUES  
 .000 CONF16 90.000  
 .140 RUDDER .000  
 .000 DRBINC .500  
 BETA DELTAZ  
 X-SRB

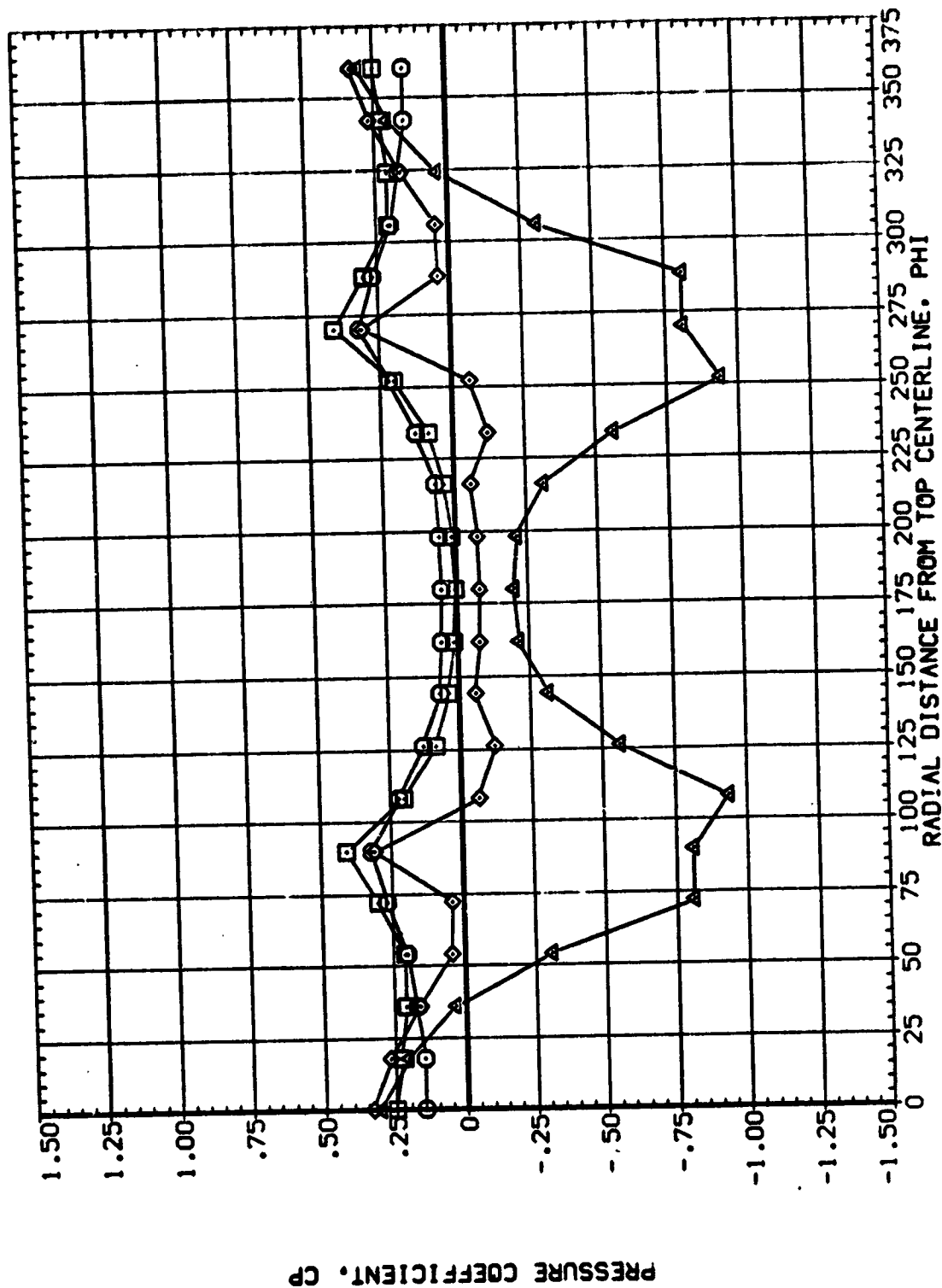


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		BETA		PARAMETRIC VALUES	
				SREF	6.198	DELTAZ	DELTAZ	CONFIG	90.000
□	.271	.000	.900	LREF	5.313	X-SRB	X-SRB	RUDDER	.000
◇	.314			BREF	5.313			ORBITAL	.500
△	.362			XMRP	2.549				
				ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

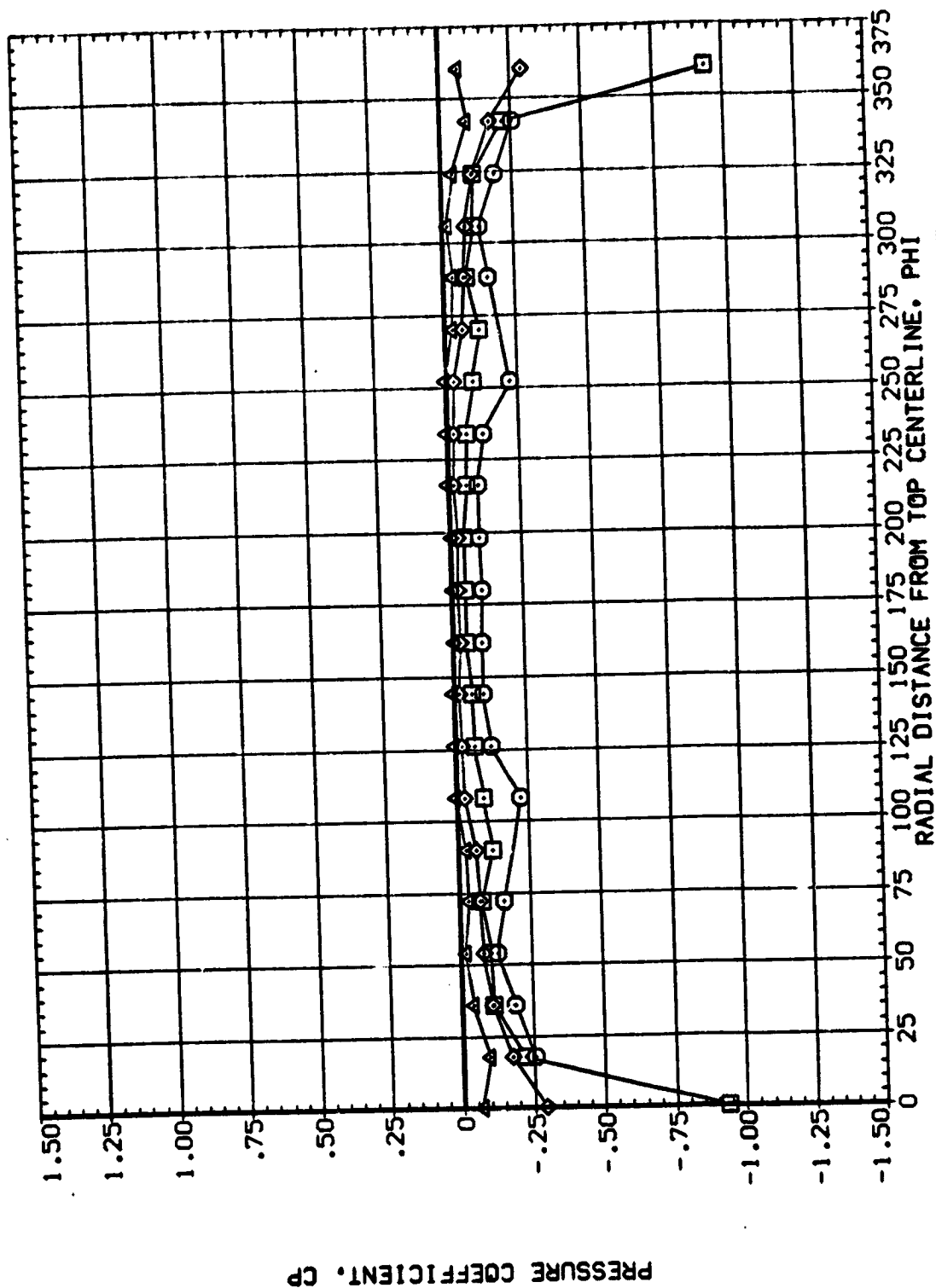
TANK (A82T05)

**Symbol** ○ □ ◇ △

X/LT	ALPHA	MACH
.438	.000	.500
.506		
.573		
.641		

REFERENCE DATA		50. IN.
SREF	6.198	IN.
LREF	5.313	IN.
BRF	5.313	IN.
XMRP	2.549	IN.
YMRP	.000	IN.
ZMRP	.000	IN.

PARAMETRIC VALUES	
.000	CONF IG
.140	R U D D E R
.000	O R B I T I N C
.500	
.000	



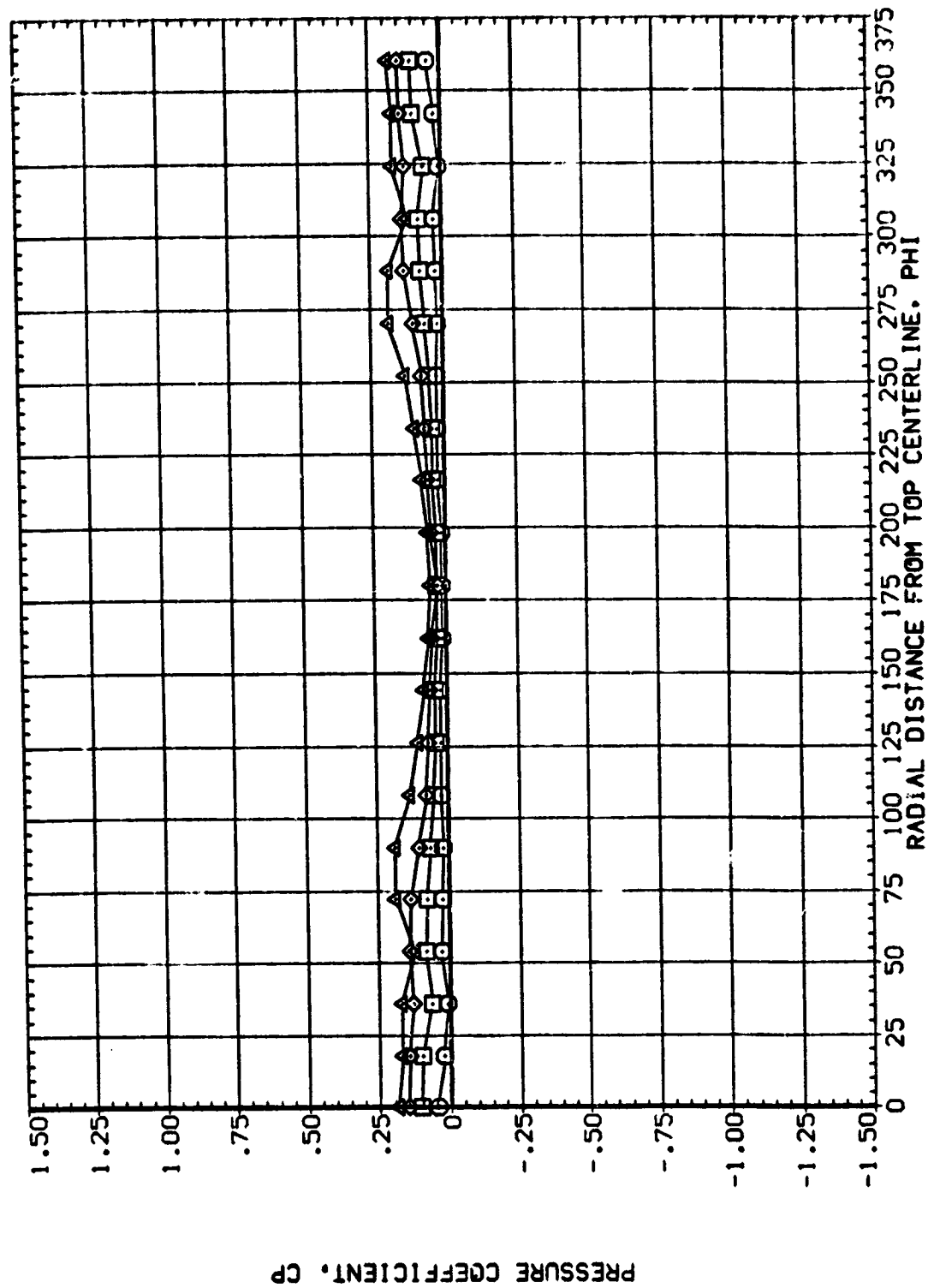
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	SREF	BETA	CONF16	CONF16	CONF16	CONF16
○	.708	.000	.900	6.198	5.313	IN.	DELTAZ	.000	.140	RUDDER	.000
□	.776	.000	.900	5.313	5.313	IN.	X-SRB	.000	.000	ORBINC	.500
◇	.844	.000	.900	2.549	2.549	IN.					
△	.912	.000	.900	.000	.000	IN.					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

**SYMBOL** 0

ALPHA .000

06' MACH

REF  
SREF  
REF

REFERENCE 1  
695

9313

 $\dot{z}$ 

**BETA**  
**DELTA**

100.

CON  
ALDI

3

000.  
000.05

—

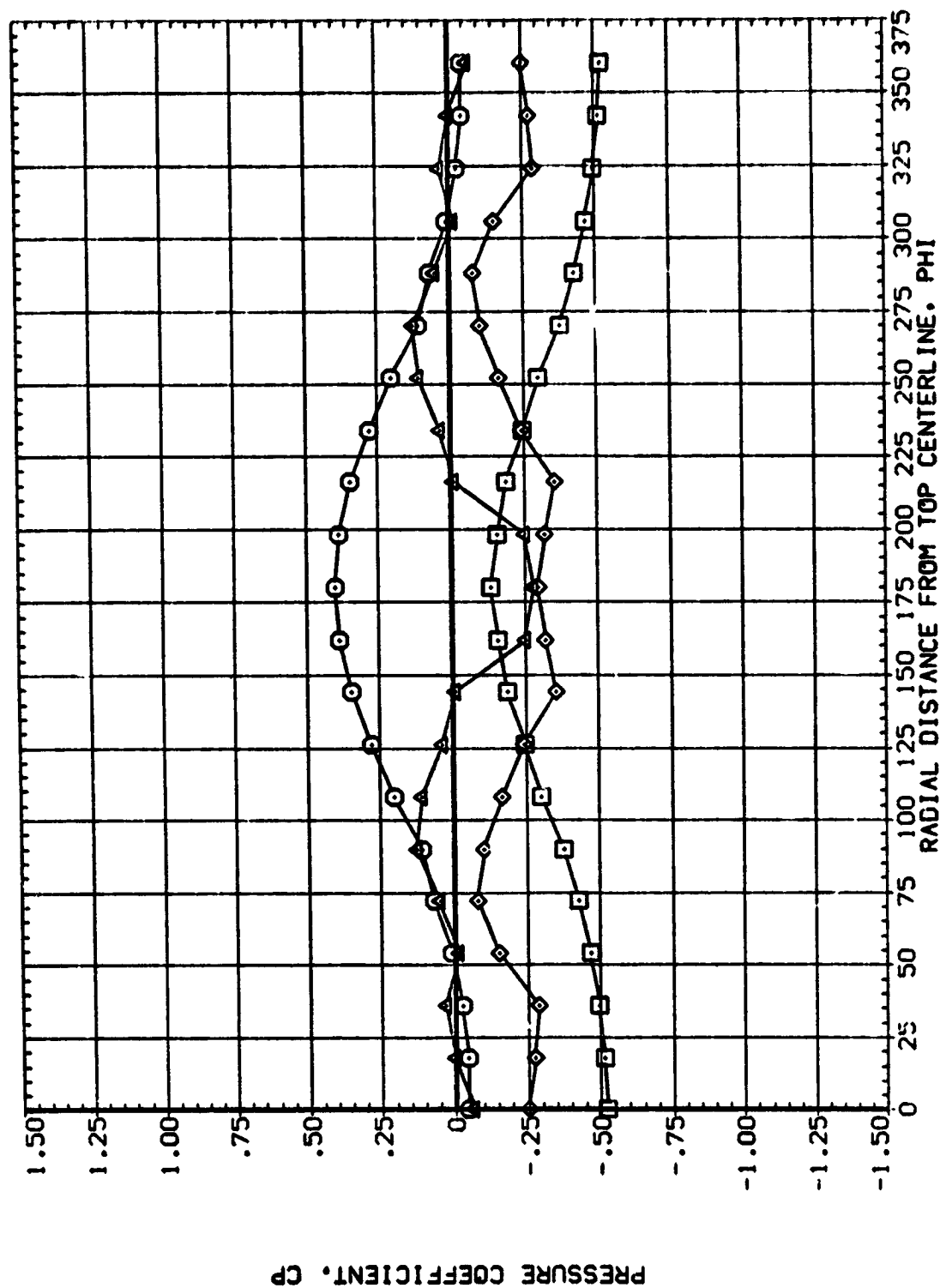
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MSFC 567(1A327) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LRREF	BREF	XRRP	BETA	CONF IG	RODER	ORRINC
○	.076	8.000	.900	6.198	5.313	5.313	2.549	DELTA Z	.000	.140	.000
◇	.155							X-SRB	.000	.000	.500
△	.220										
▽	.235										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT .271  
 .314  
 .350  
 .382

ALPHA 8.000

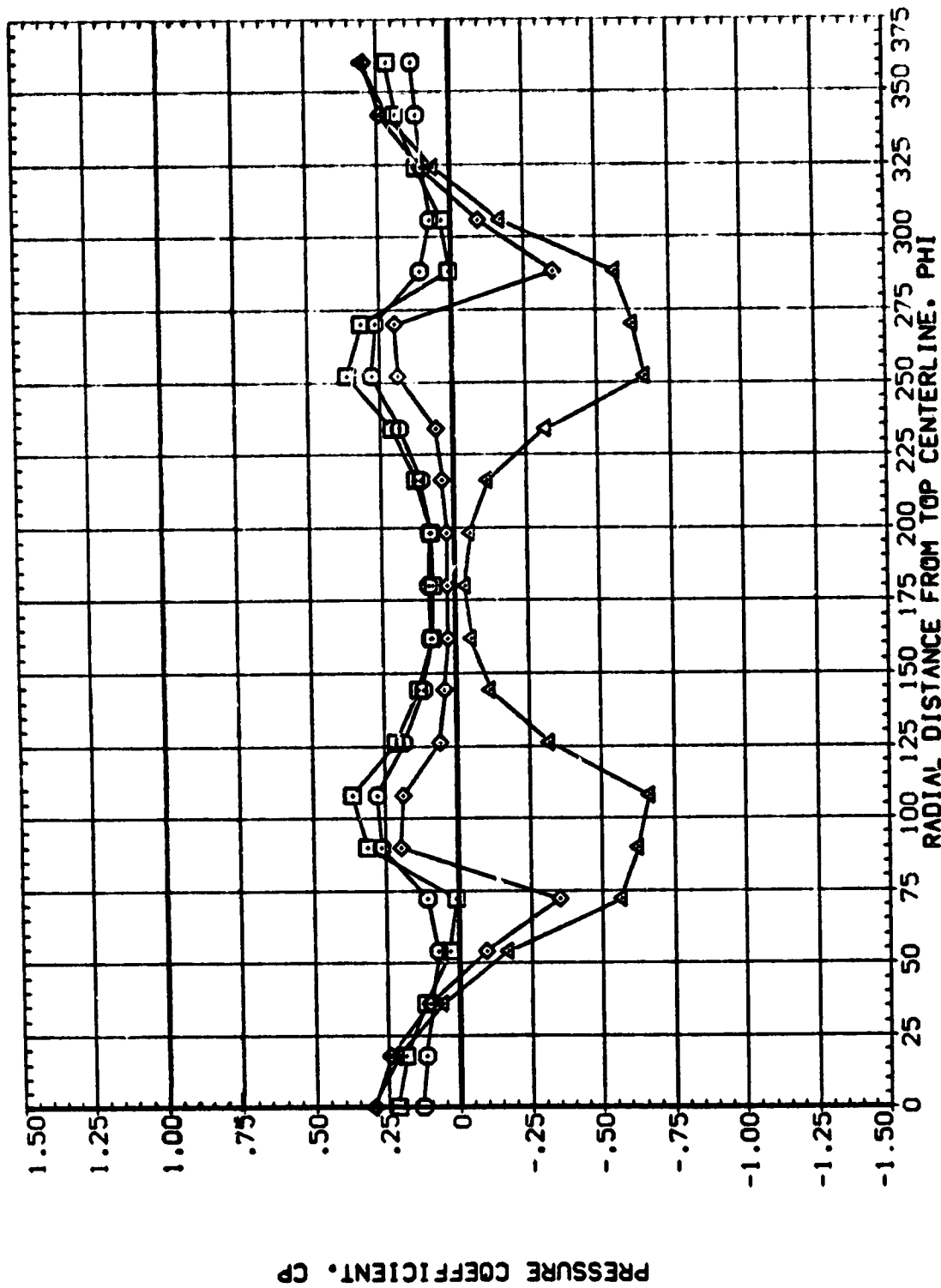
MACH .900

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XPRP 2.549  
 YPRP .000  
 ZPRP .000

SO. IN.  
 IN.  
 IN.  
 IN.  
 IN.

PARAMETRIC VALUES  
 .000 CONFIG  
 .140 RUDDER  
 .000 ORBINC

90.000  
 .000  
 .500

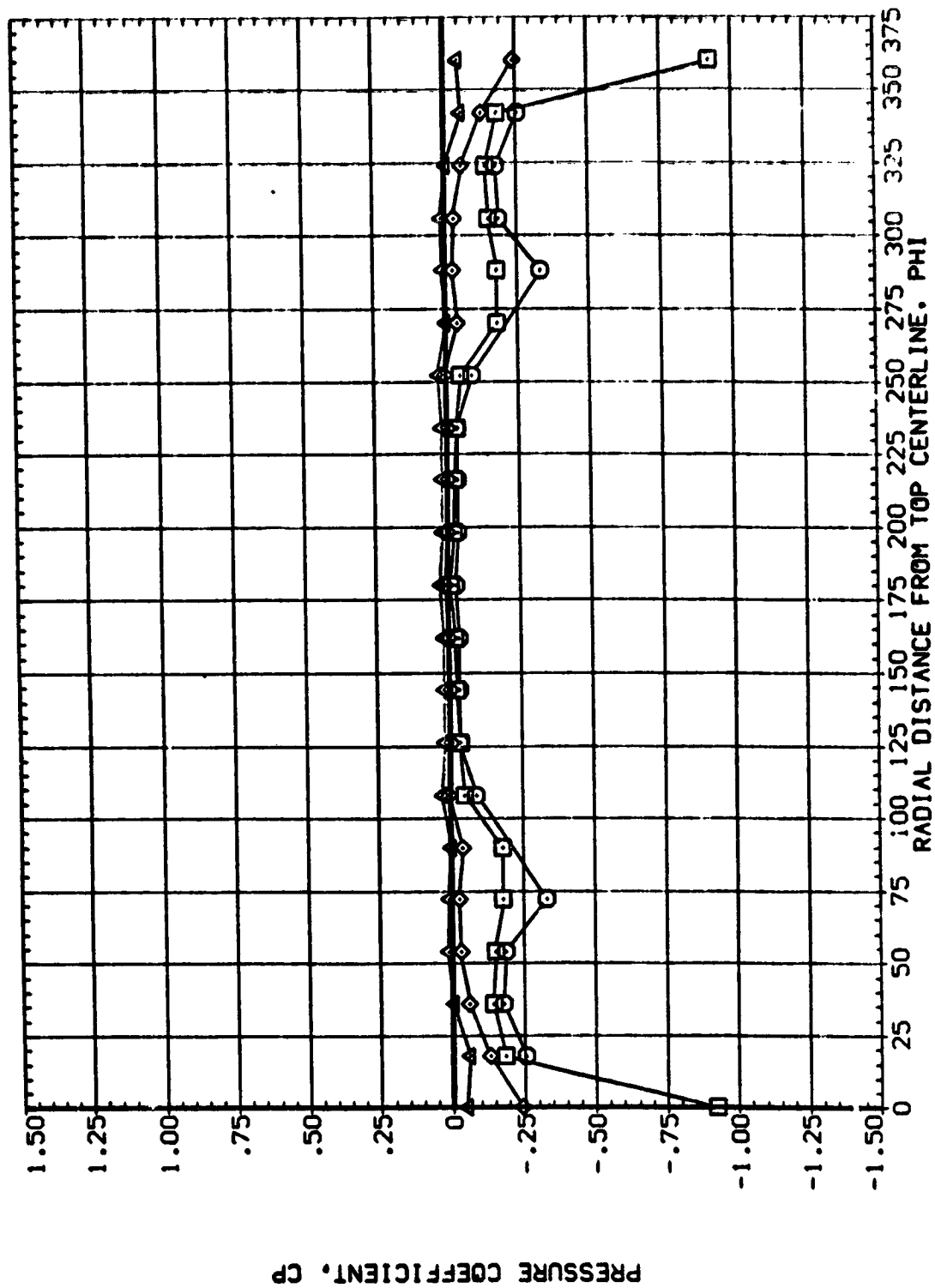


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

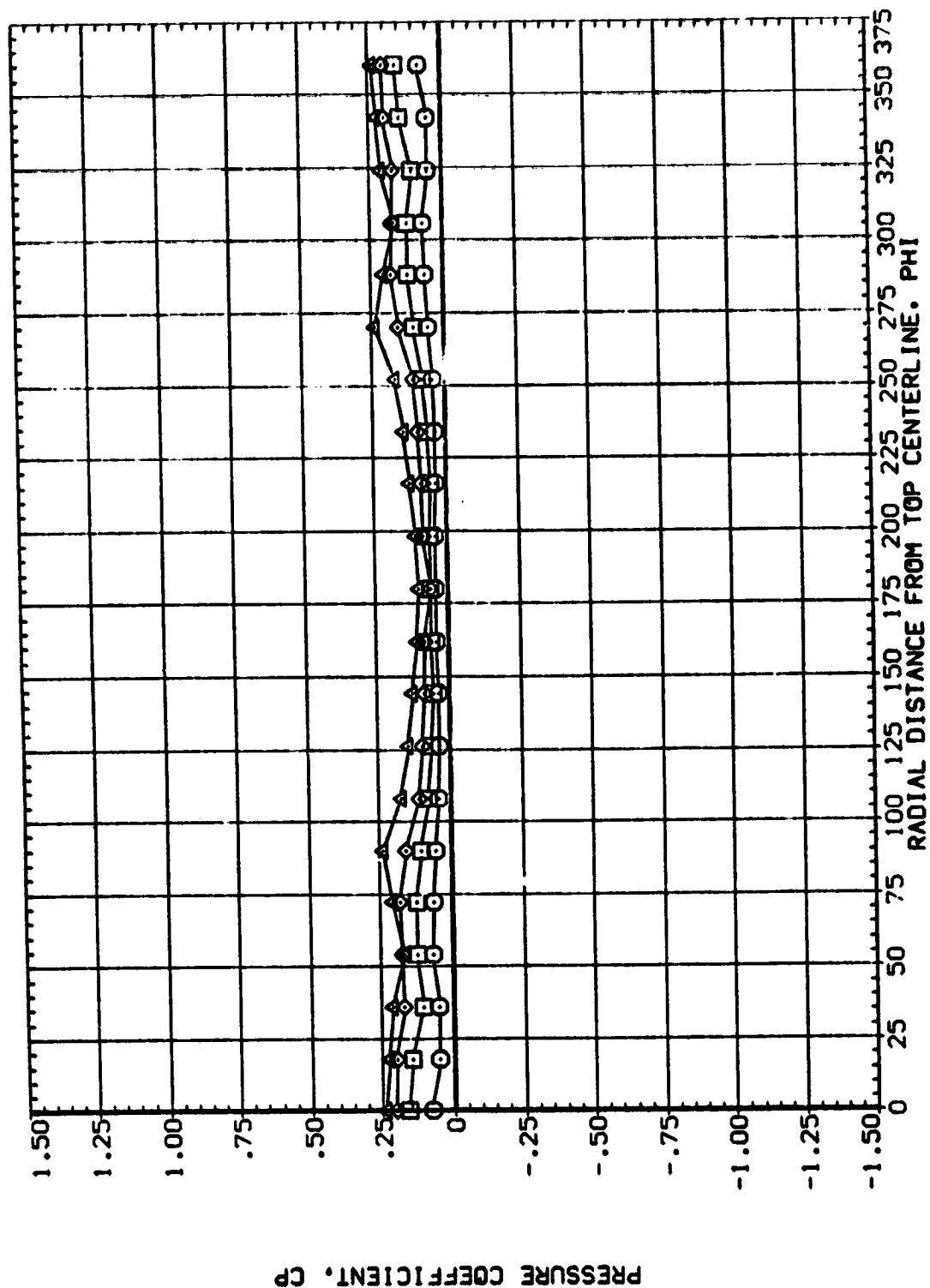
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	BETA	CONFIG	RLIDER	ORBITAL
○	.438	8.000	.900	6.198	5.313	5.313	2.549	DELTAZ	.000	.140	.000
□	.506							X-SRB	.000	.000	.500
△	.573										
◇	.641										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
◇	.708	8.000	.900	SREF 6.198	DELTA Z	CONFIS 50.000
□	.776			LREF 5.313	X-SRB	RUDER .000
△	.844			BREF 5.313		ORBITAL .000
	.912			XPRP 2.549		
				YPRP .000		
				ZPRP .000		

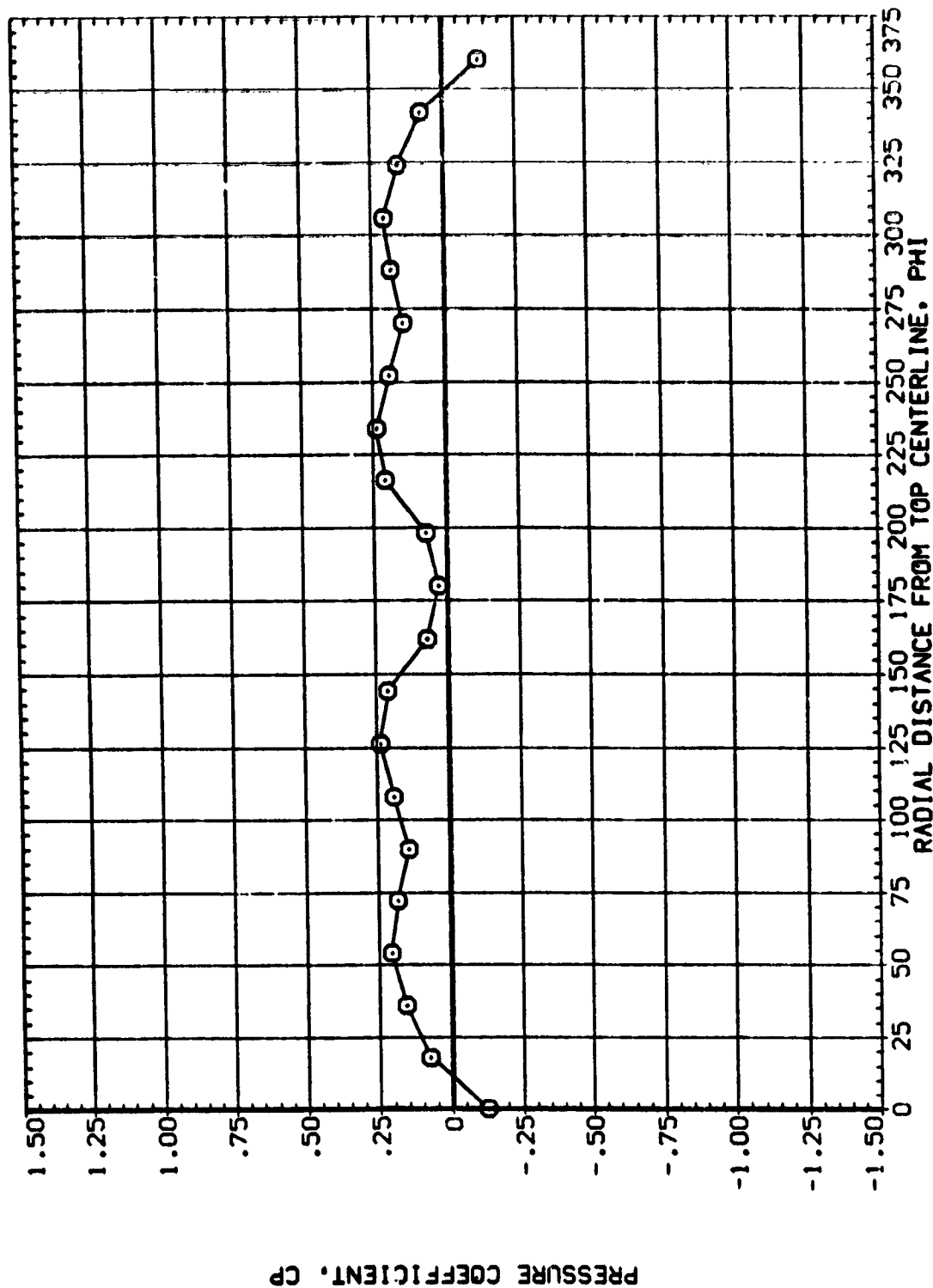


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

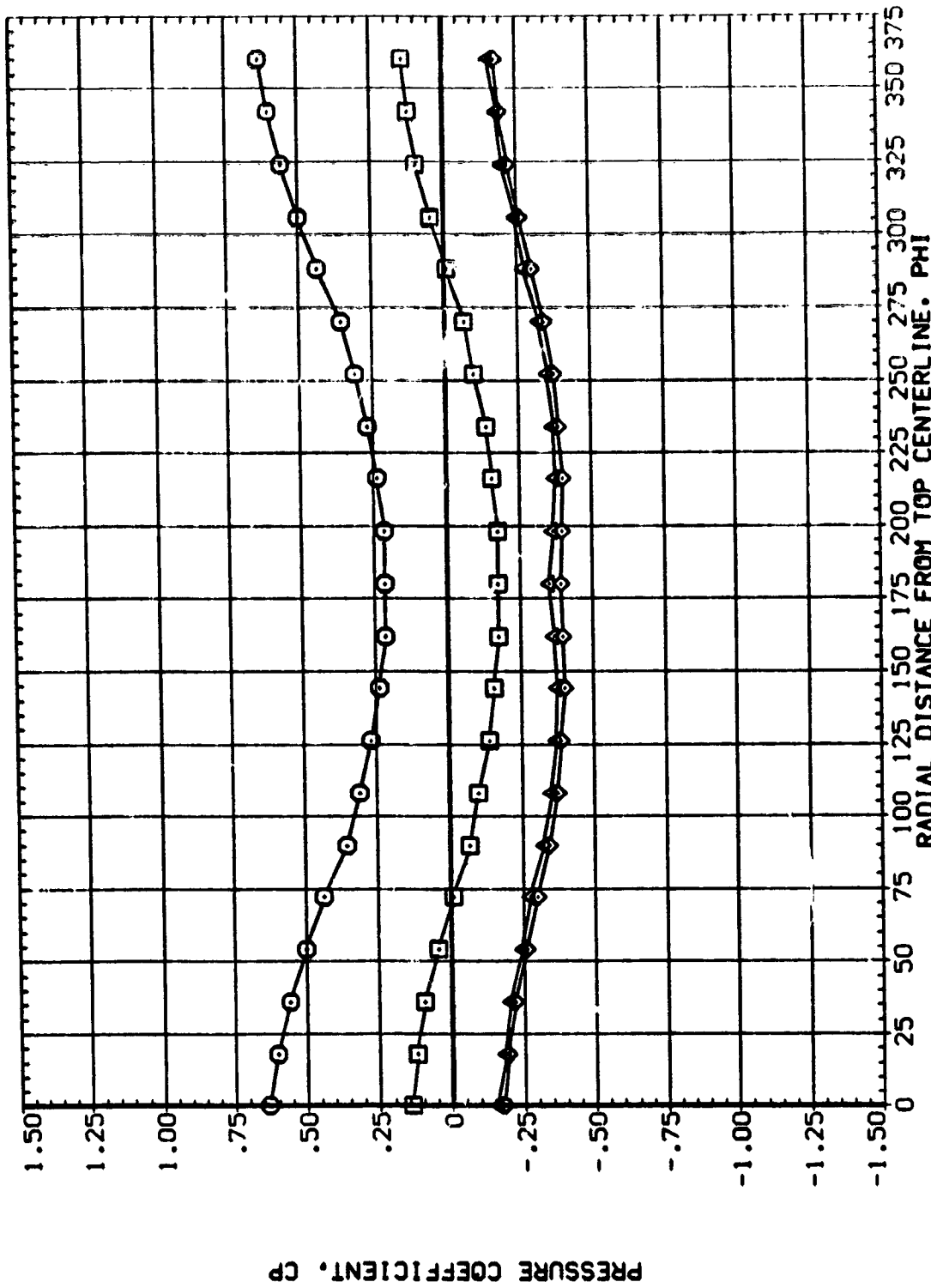
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	BETA	CONF IS	RUDDER	DRB INC
0	.984	8.000	.900	6.198	5.313	5.313	2.549	DELTA Z X-SRB	.000	.140	.000
				YREF	ZREF						.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BETA	DELTA Z	CONF IG	
○	.076	-8.000	1.250	6.198	5.313	5.313	2.549	.000	.140	RUDDER	.000
◇	.155							.000		OPB INC	.500
△	.235										



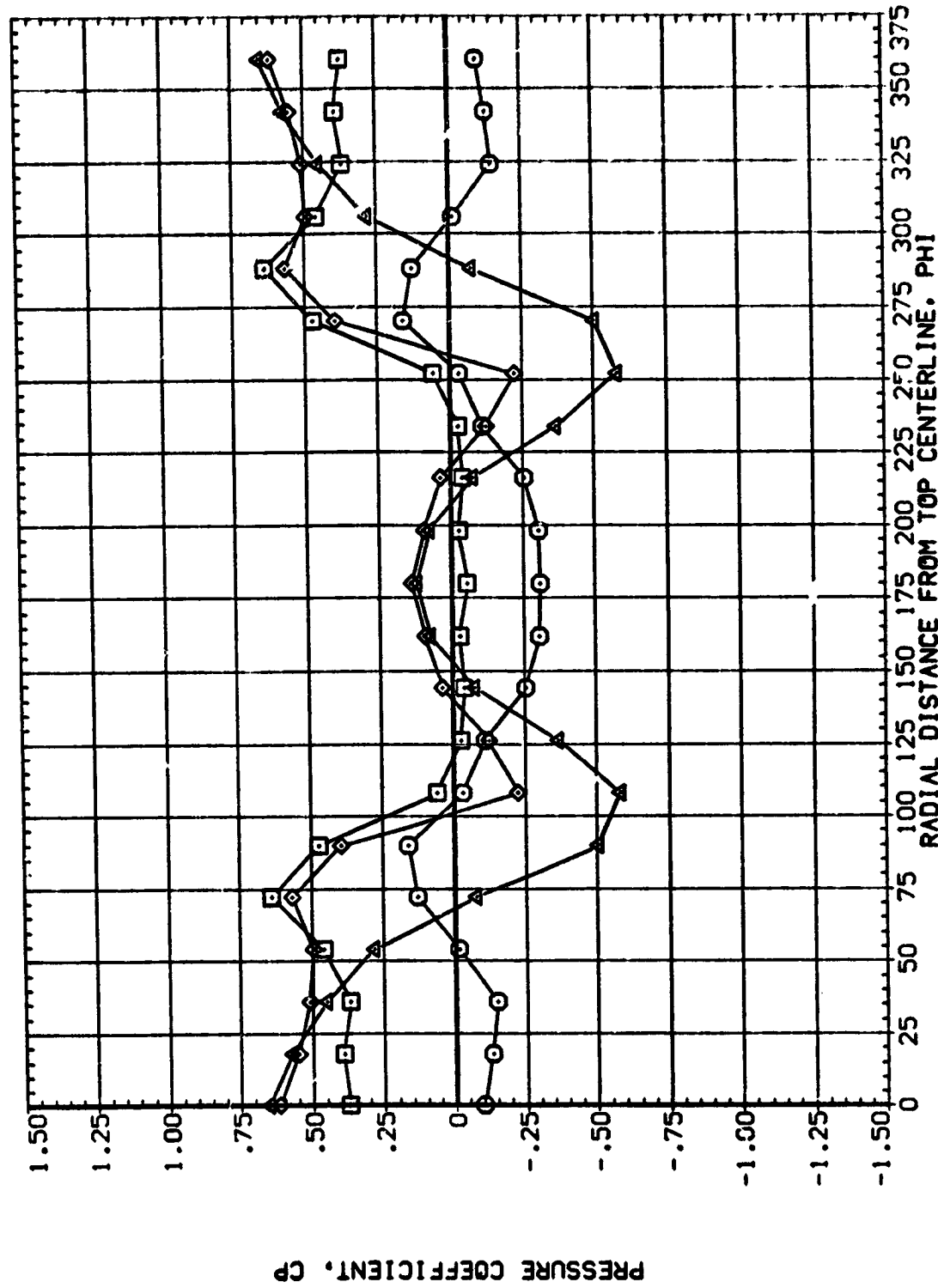
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

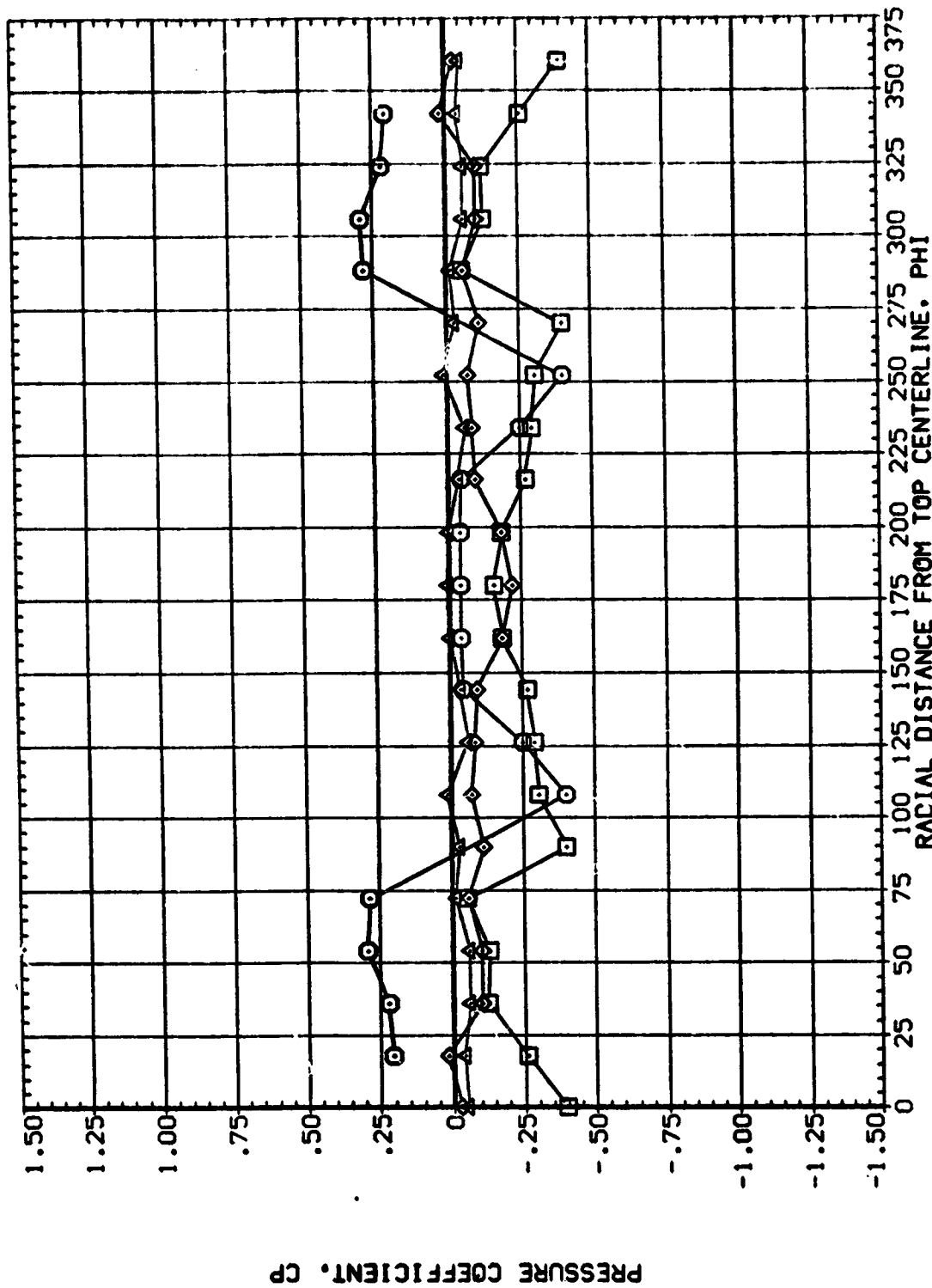
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	SO. IN.	BETA	CONFIG
○	.271	-8.000	1.250	6.198	5.313	5.313	2.549	.000	IN.	DELTA Z	.000
□	.314								IN.	X-SRB	.140
◇	.350								IN.	RUDDER	.000
△	.382								IN.	DRB INC	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	50. IN.	BETA	CONF 15	90.000
○	.438	-8.000	1.250	6.198	5.313	5.313	2.549	IN.	DELTA Z	.000	.000
□	.506							IN.	X-SRB	.1-0	.000
◇	.573							IN.		.000	.500
△	.641							IN.			

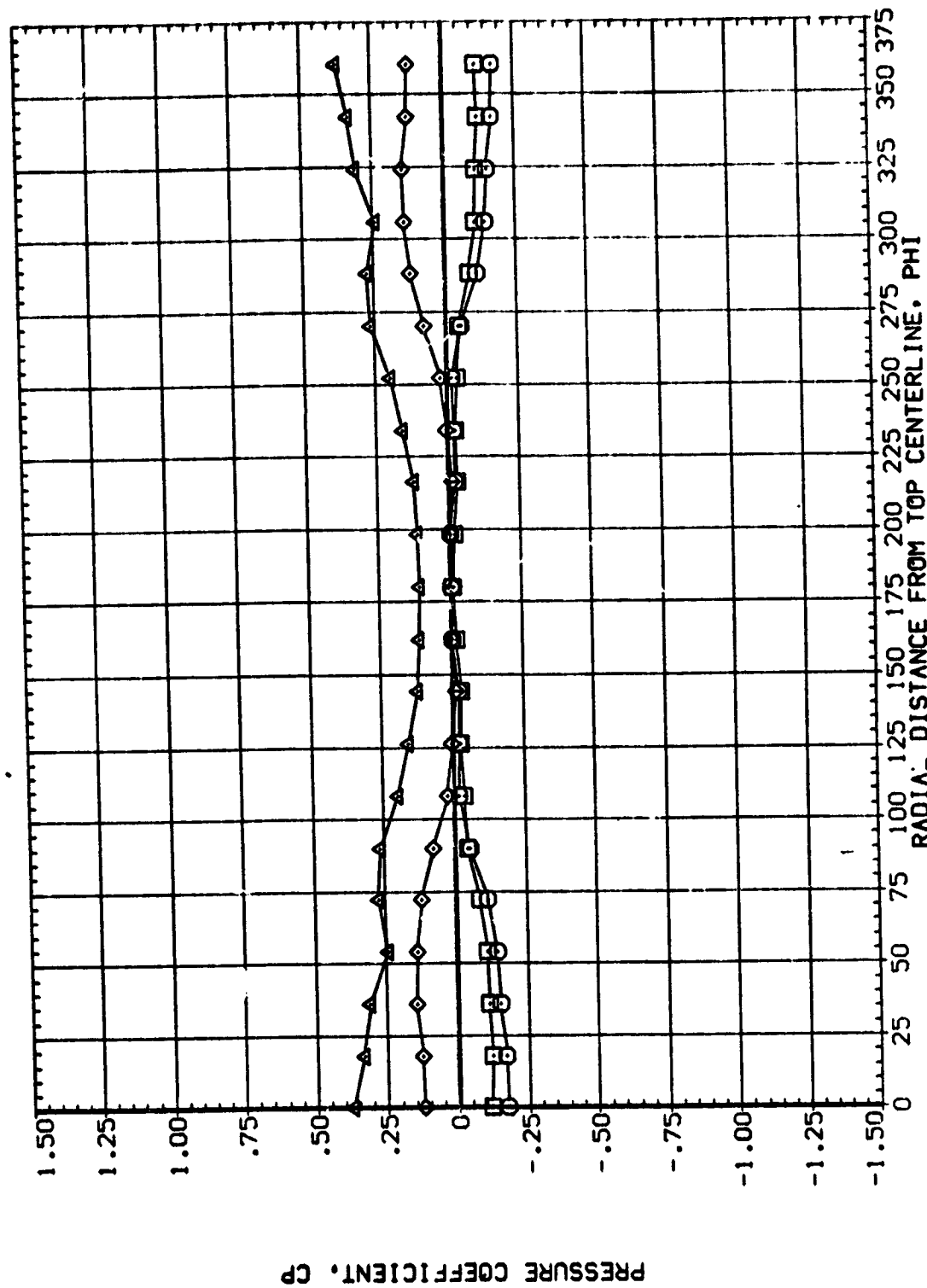


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

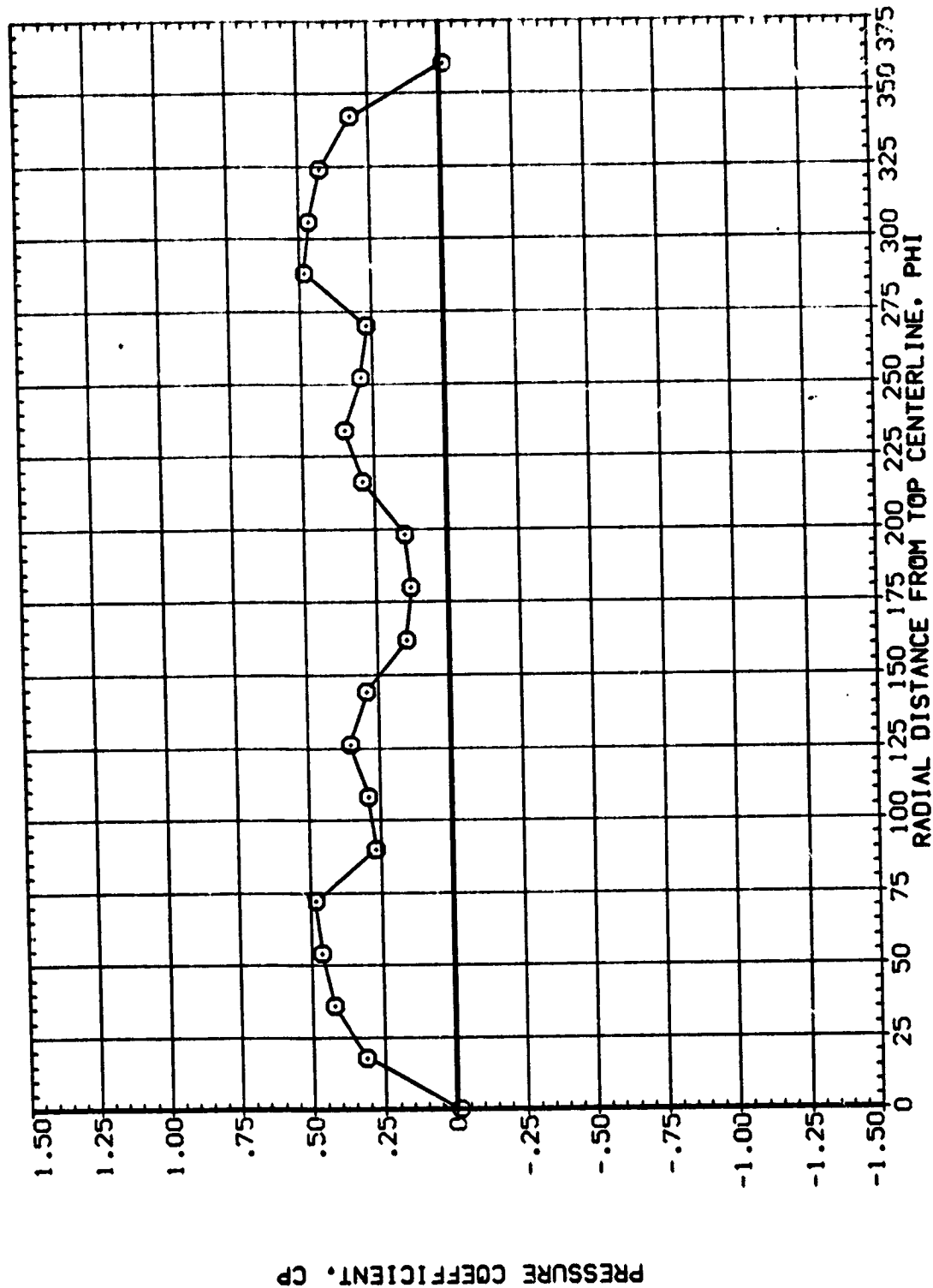
SYMBOL	X/LT		ALPHA		MACH		REFERENCE DATA				PARAMETRIC VALUES			
	.708	.776	.844	.912	-8.000	1.250	SREF	LREF	BREF	XRRP	ZRRP	BETA	DELTA Z	X-SRB
◇							6.198	5.313	5.313	2.549	.000	.000	.140	.000
□												.000	.000	.000
△												.000	.000	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

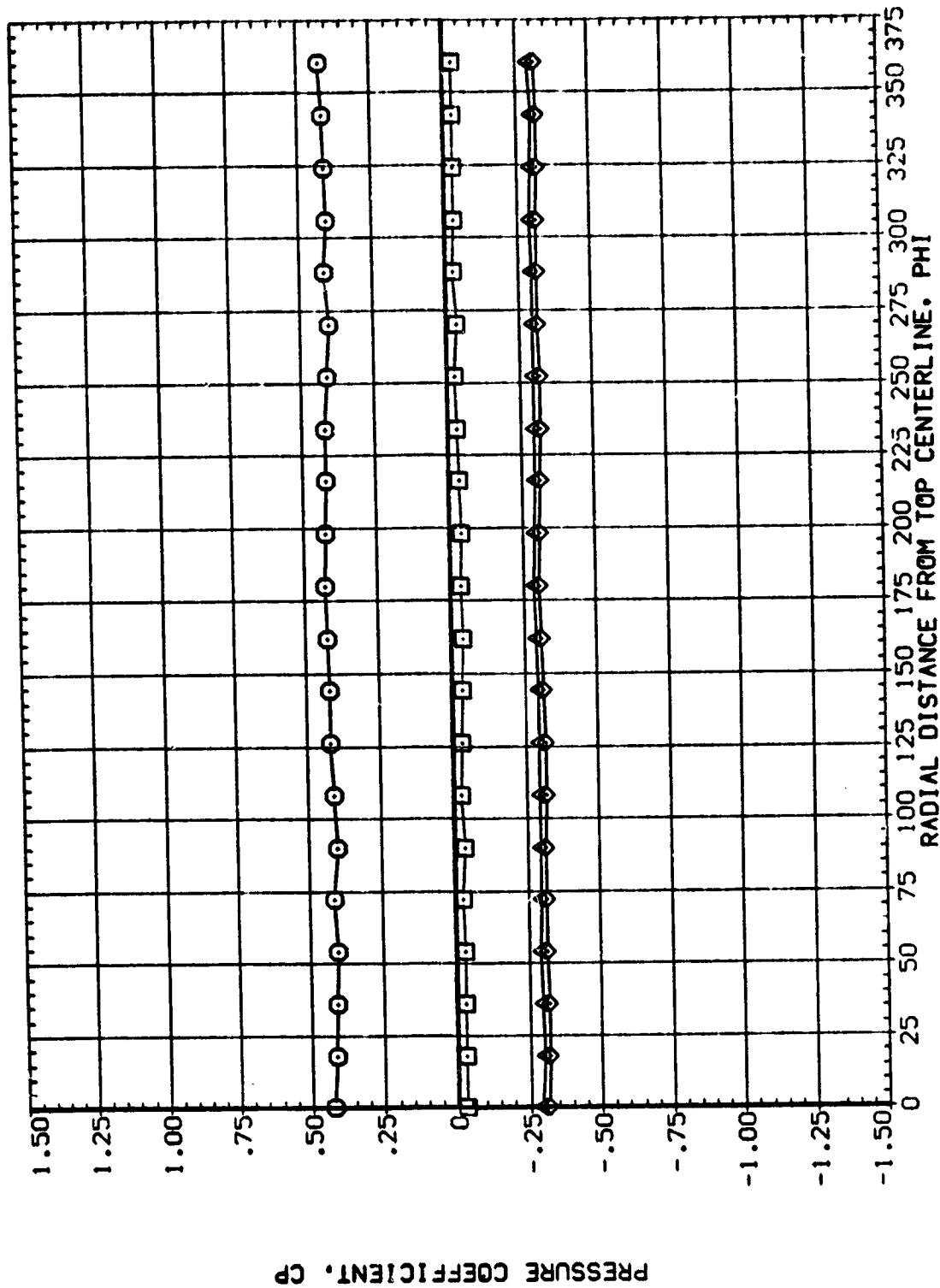
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
0	.984	-8.000	1.250	SREF 6.198 LREF 5.313 BREF 5.313 XMRP 2.549 YMRP .000 ZMRP .000	BETA .000 DELTAZ .140 X-SRB .000 ORBITAL .500
				SG. IN. IN. IN. IN. IN.	CONFIG 90.000 RUDDER .000 ORBITAL .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

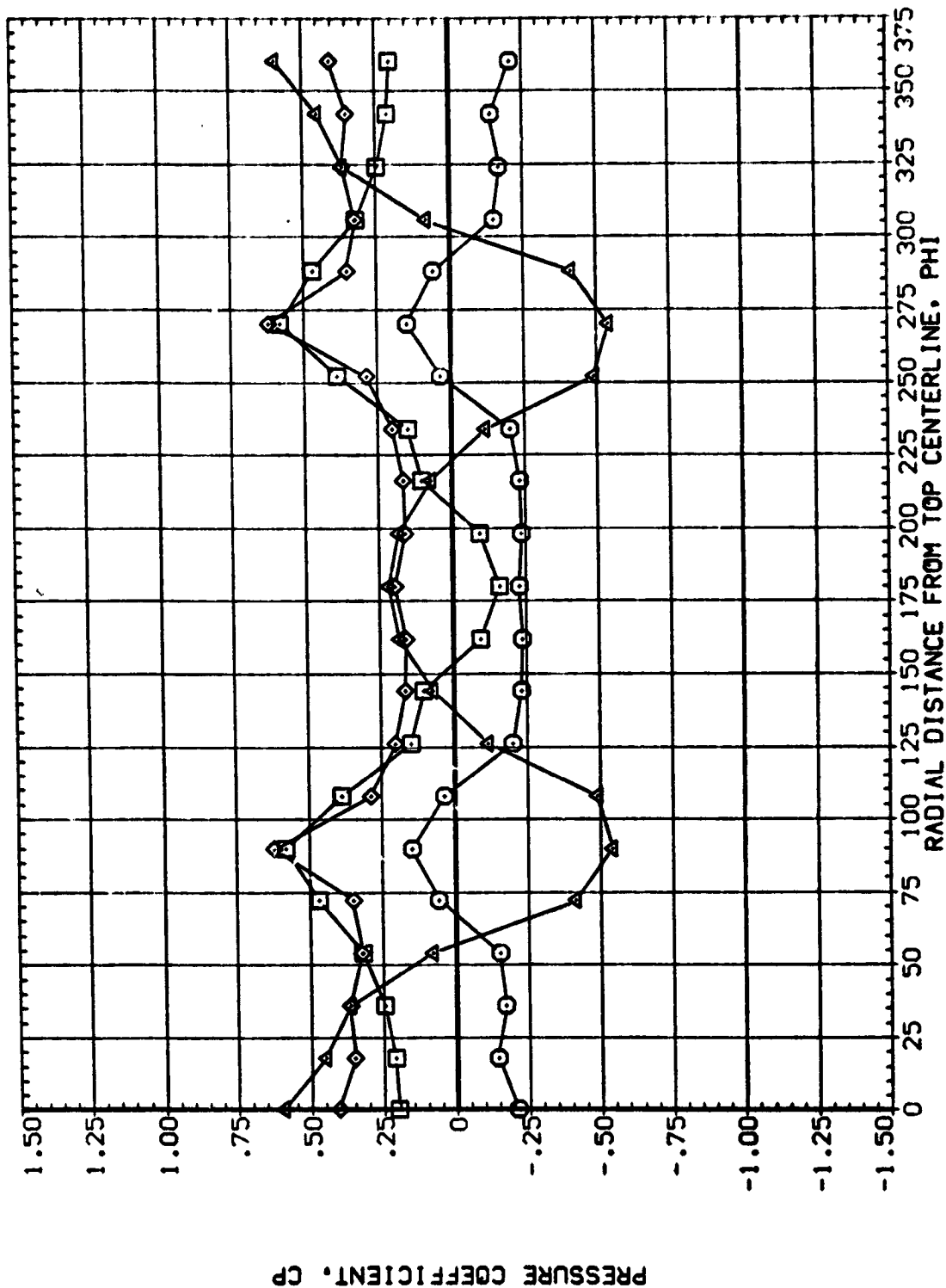
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SD. IN.	BETA	CONF IG	
○	.076	.000	1.250	6.198	5.313	IN.			DELTA Z	.000	CONF IG
□	.155			5.313	2.549	IN.			X-SRB	.000	RUDDER
◇	.220			.000		IN.				.000	ORBIT INC
△	.235					IN.				.500	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMPP	YMRP	ZMRP	SO. IN.	BETA
□	.271	.000	1.250	6.198	5.313	5.313	2.549	.000	.000	IN.	DELTAZ
◇	.314									IN.	X-SRB
△	.350									IN.	
△	.382									IN.	
											CONFIG
											RUDDER
											ORBINC



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

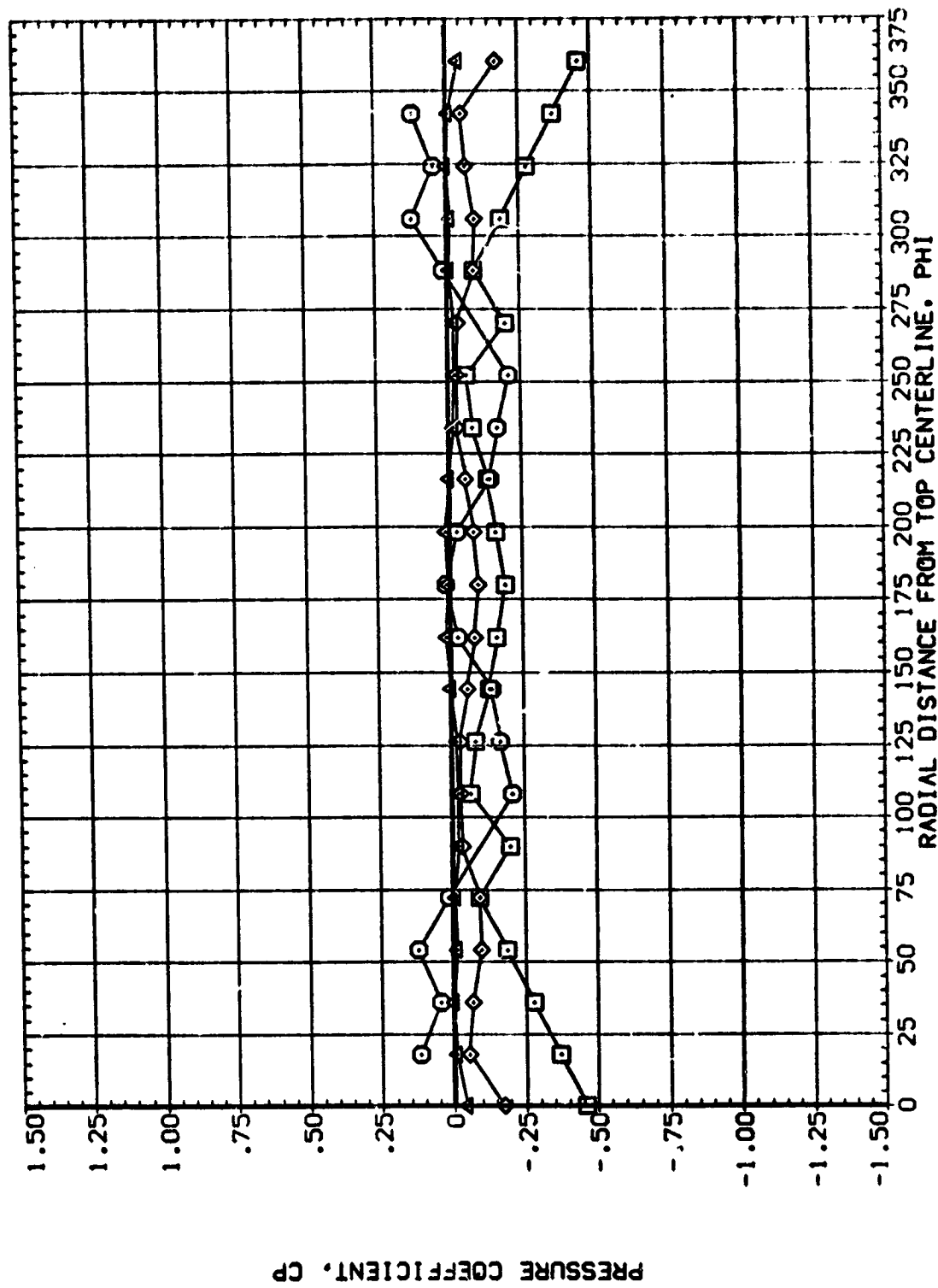
# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/LT    ALPHA    MACH  
 .438    .000    1.250  
 .506  
 .573  
 .641

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

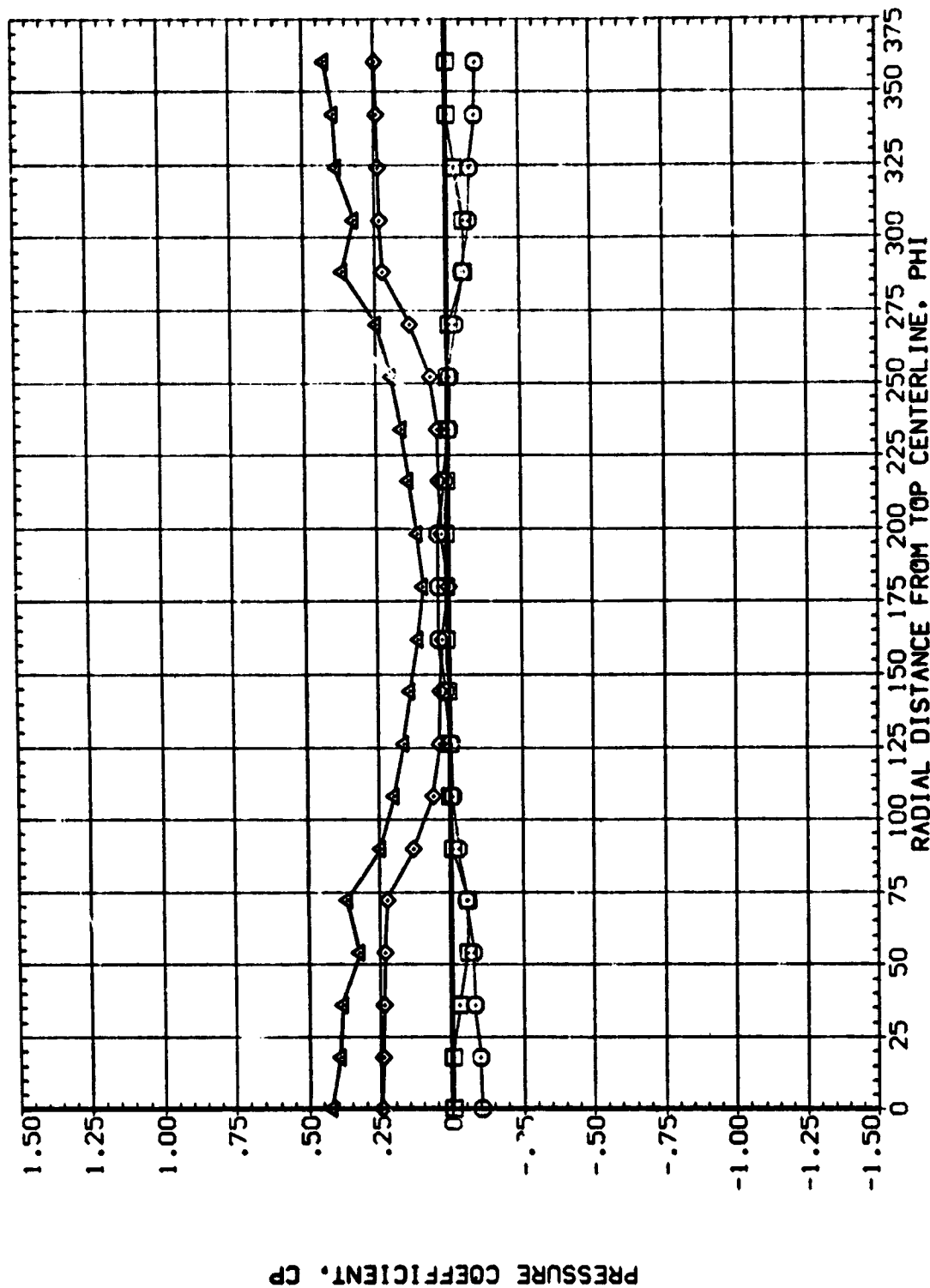
PARAMETRIC VALUES  
 .000    CONF IG    90.000  
 .140    RUDDER    .000  
 .000    ORBINC    .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SIMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.708	.000	1.250	SREF 6.198	.000 CONF IG
□	.776			LREF 5.313	.000 RUDER
◇	.844			BREF 5.313	.140
△	.912			X-REF 2.549	.000
				Y-REF .000	.500
				Z-REF .000	



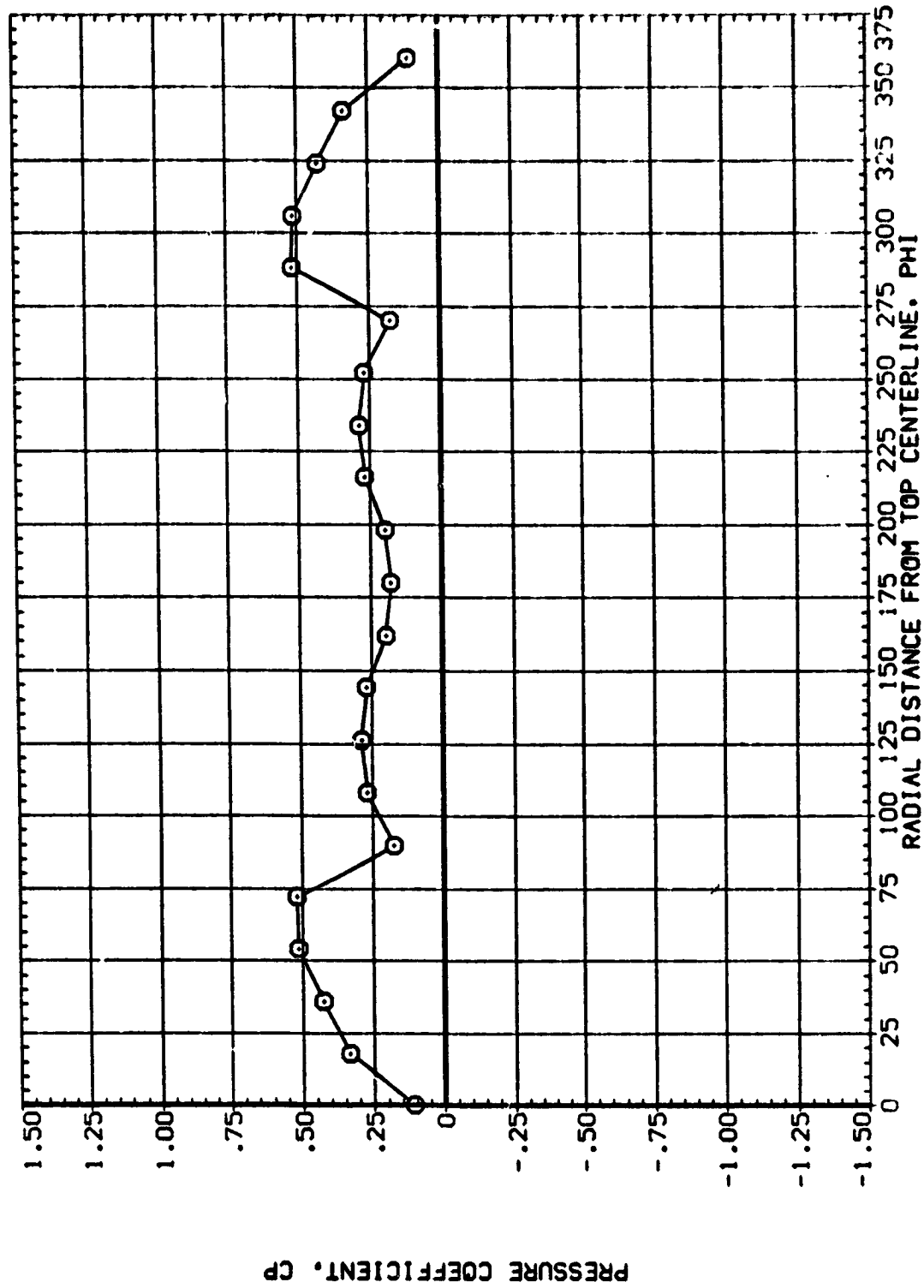
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XREF	BETA	CONFIG	RUDDER	ORIGIN
O	.584	.000	1.250	6.198	5.313	5.313	2.549	DELTAZ X-508	.000	.140	.000
				YREF	ZREF						
				.000	.000						



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A. 2105)

SYMBOL  
 ○ □ ◇ △

X/LT .076  
 .195  
 .220  
 .235

ALPHA 8.000

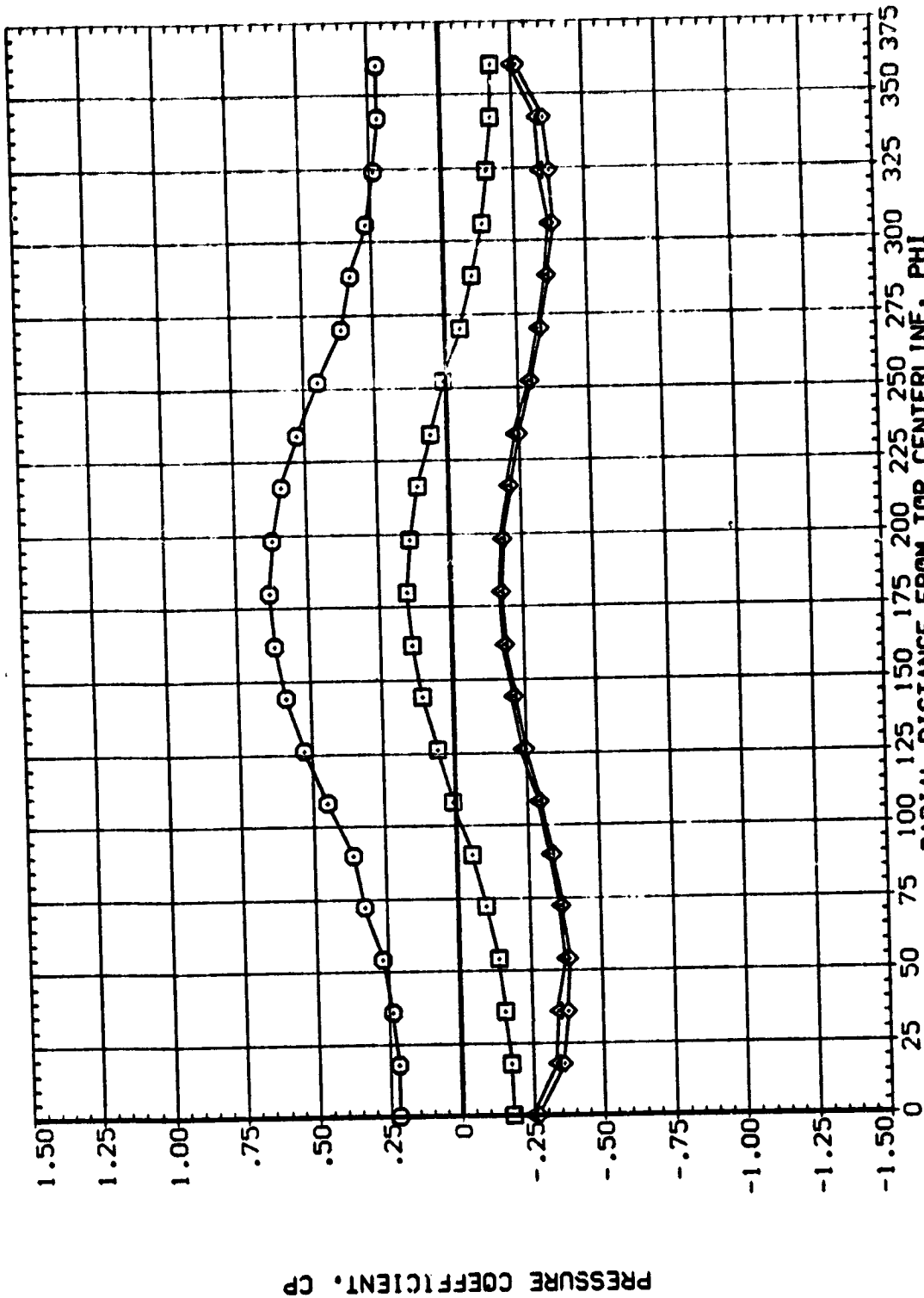
MACH 1.250

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTAZ  
 X-SRB

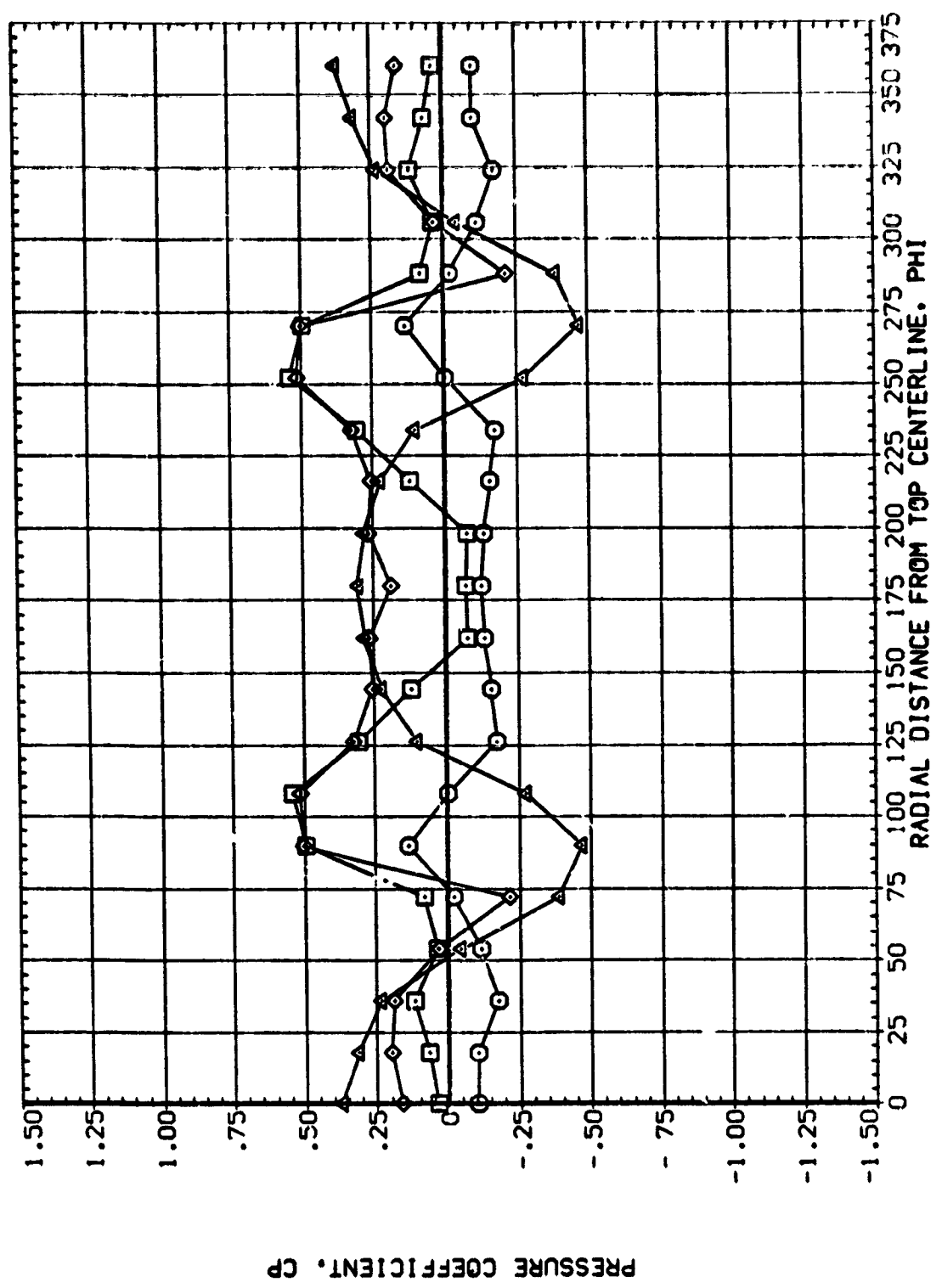
PARAMETRIC VALUES  
 .000 CONF IG  
 .140 RUDDER  
 .000 ORBINC  
 .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	50. IN.	BETA	CONF IG	50. IN.
□	.271	8.000	1.250	6.198	5.313	DELTA Z		IN.	X-S98	.000	CONF IG
◇	.314			5.313	2.549	IN.		IN.		.140	RUDDER
△	.350			2.549	.000	IN.		IN.		.000	ORBIT INC
	.382			.000	.000	IN.		IN.		.500	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
○  
□  
◇  
△

X/LT ALPHA MACH  
.438 8.000 1.250  
.506  
.573  
.641

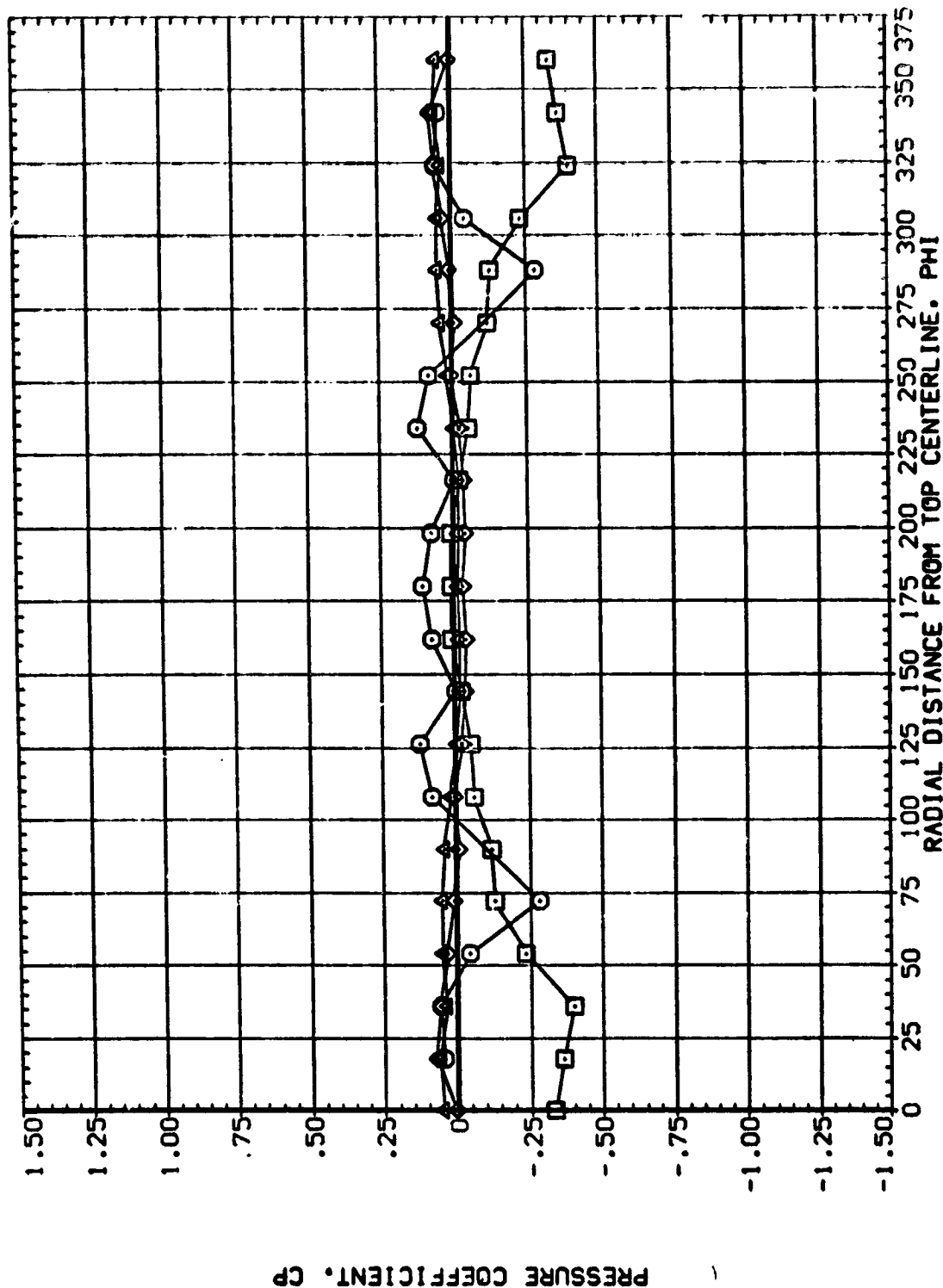
REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SC. IN.  
IN.  
IN.  
IN.

BETA  
DELTAZ  
X-SRB

PARAMETRIC VALUES  
.000 CONF IG  
.140 RUDDER  
.000 ORBINE

90.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5



MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL  
□  
◇  
△

X/LT .708  
.776  
.844  
.912

ALPHA 8.000

MACH 1.250

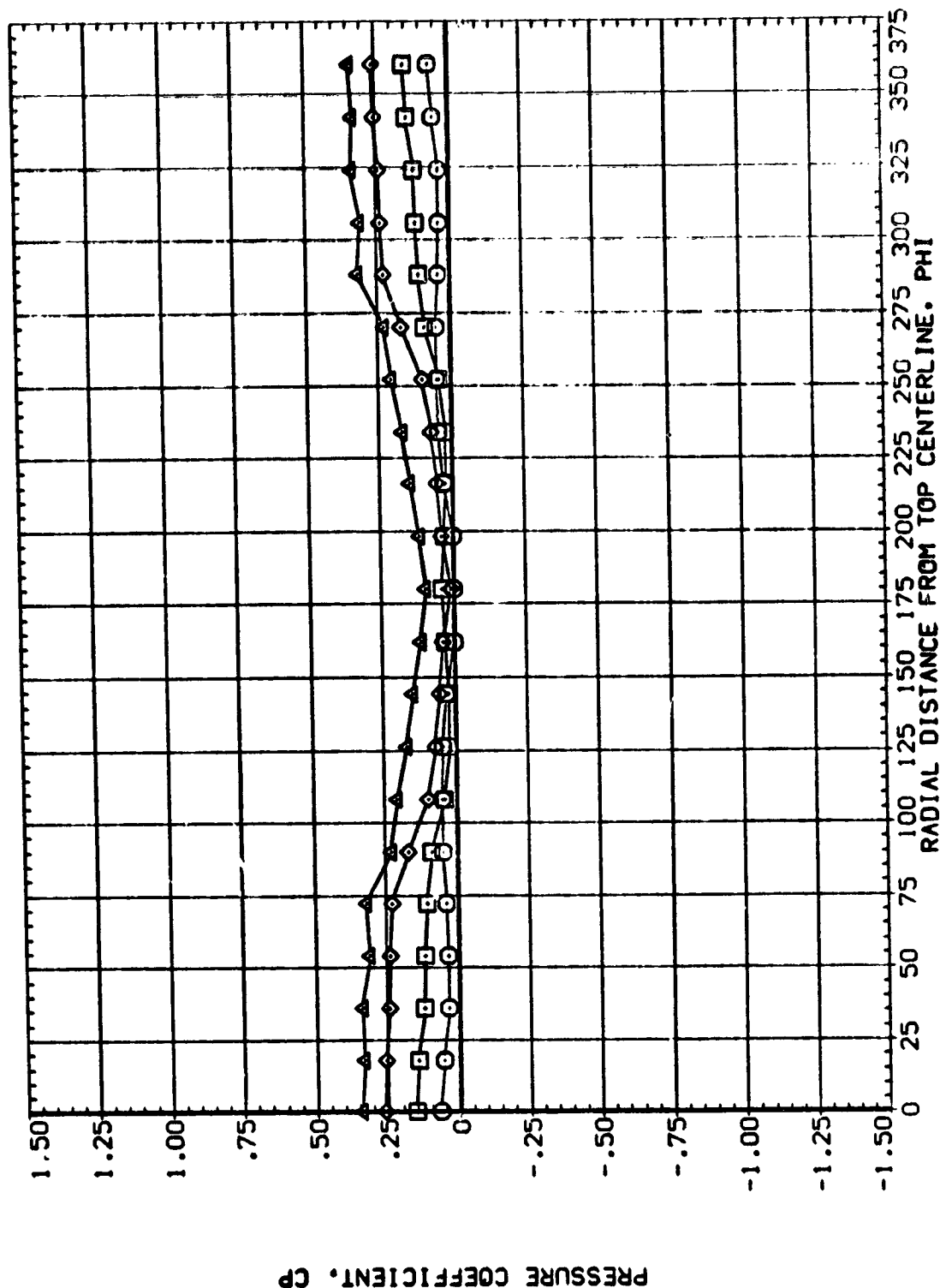
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XREF 5.313  
YREF 2.549  
ZREF .000

SD. IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000  
.14C  
.000

CONFIS  
RLODER  
DRBINC



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

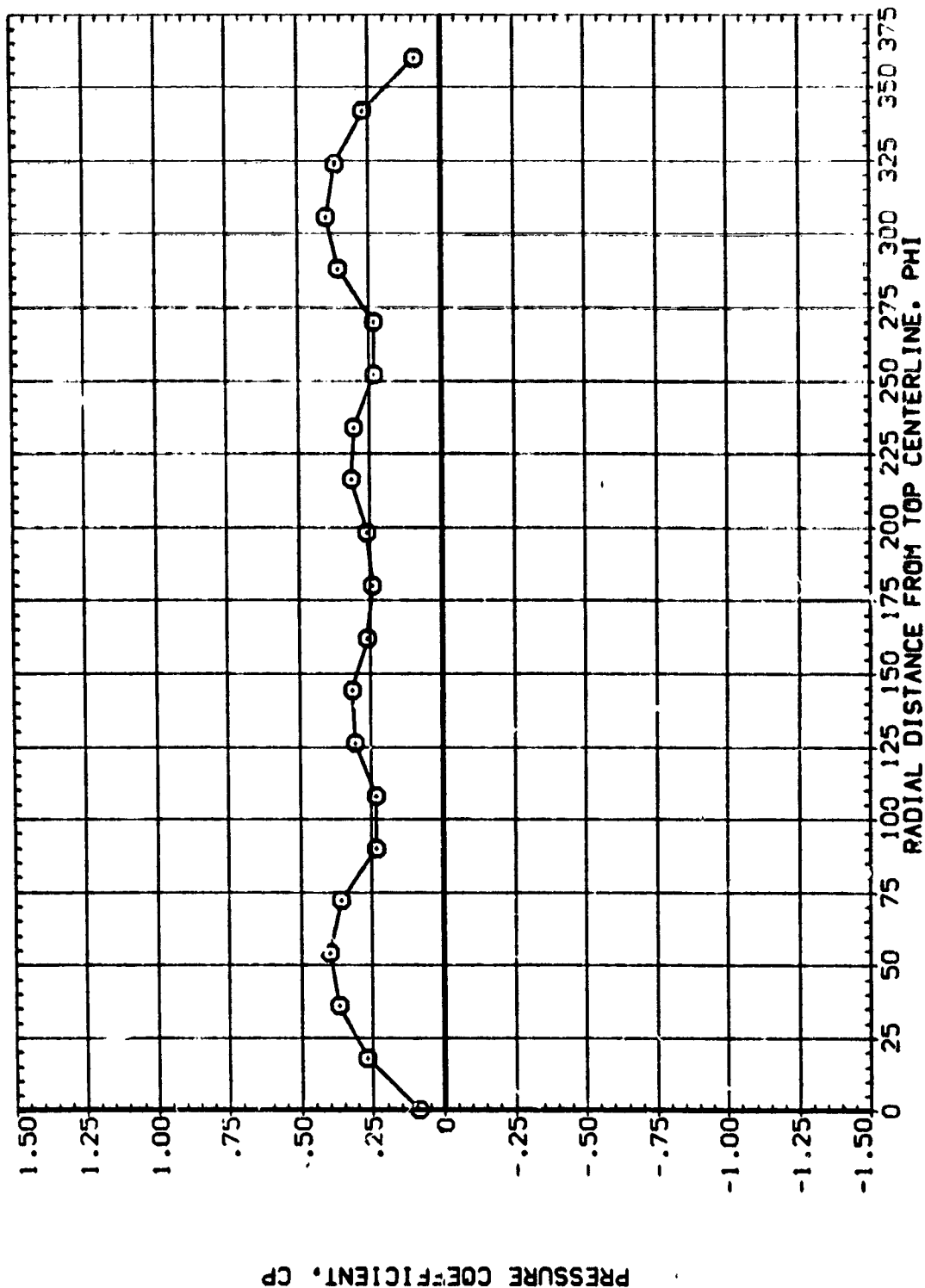
# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
○

X/LT .984 ALPHA 8.000 MACH 1.250

REFERENCE DATA  
SREF 6.198 SO. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

PARAMETRIC VALUES  
.000 CONF 15 90.000  
.140 RUDER .000  
.000 ORBINE .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

11

C-9

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL

X/LT

ALPHA

MACH

REFERENCE DATA

SO. IN.

BETA

PARAMETRIC VALUES

CONF TS

RUDDER

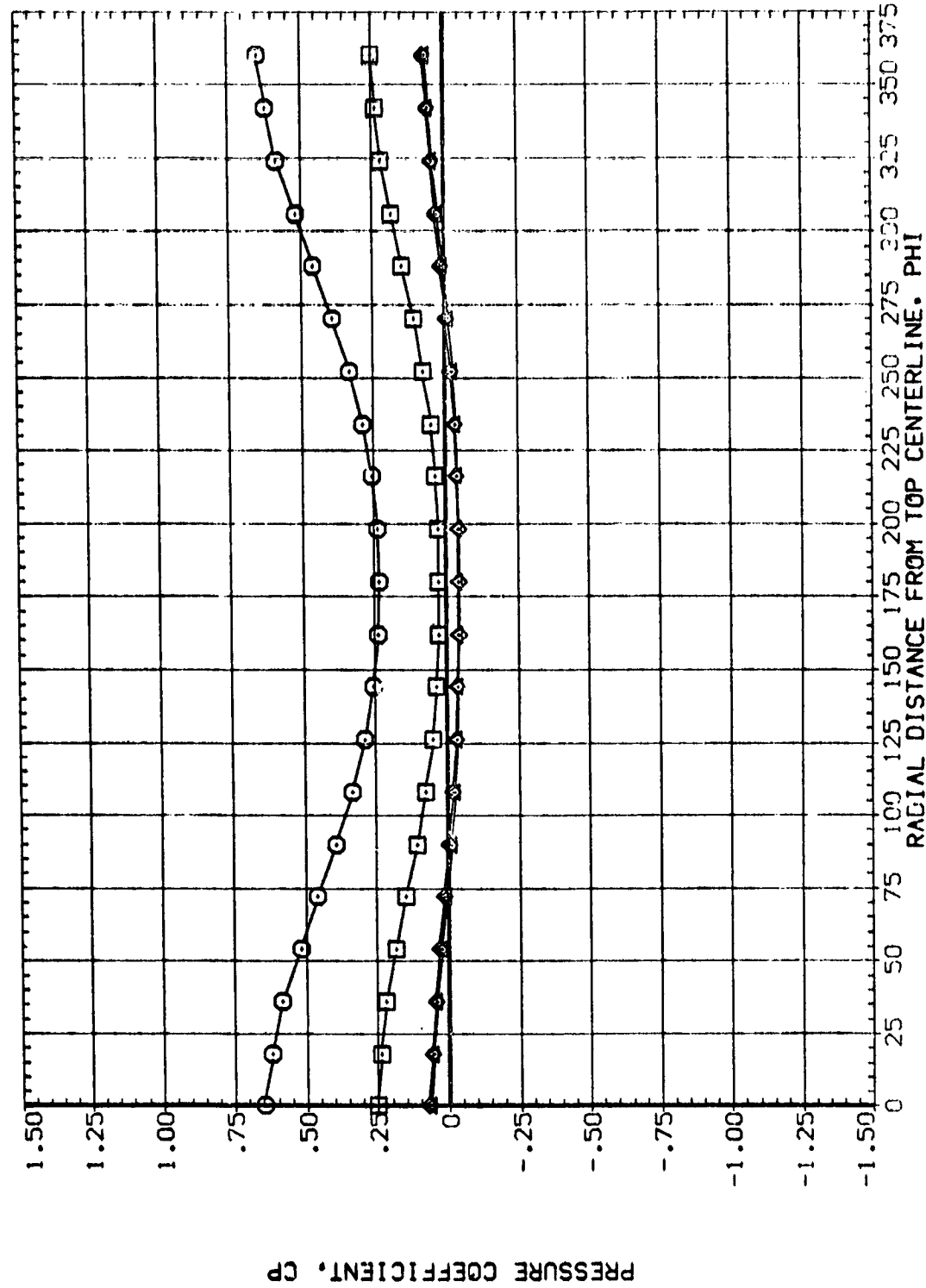
SPSINC

DELTA Z

X-SRB

DELTA Z

X-SRB



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK(A82T05)

SYMBOL

X/LT .271  
 .314  
 .350  
 .382

ALPHA -8.000

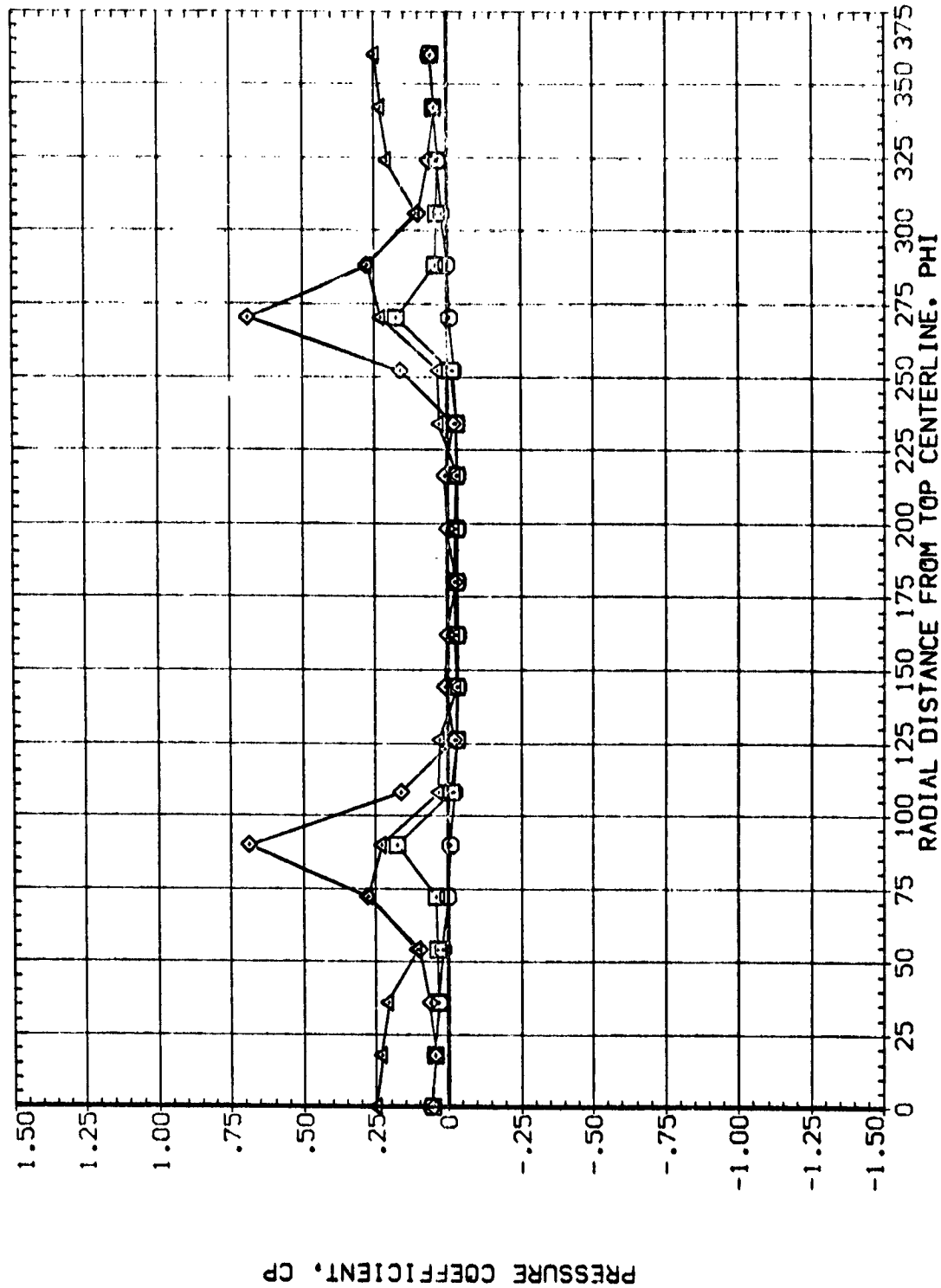
MACH 3.500

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.

BETA  
 DELTAZ  
 X-SRB

PARAMETRIC VALUES  
 .000 .000  
 .140 RUDDER  
 .000 .000  
 .500 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
○  
□  
◇  
△

X/LT .138  
.506  
.573  
.641

ALPHA  
-8.000

MACH  
3.500

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

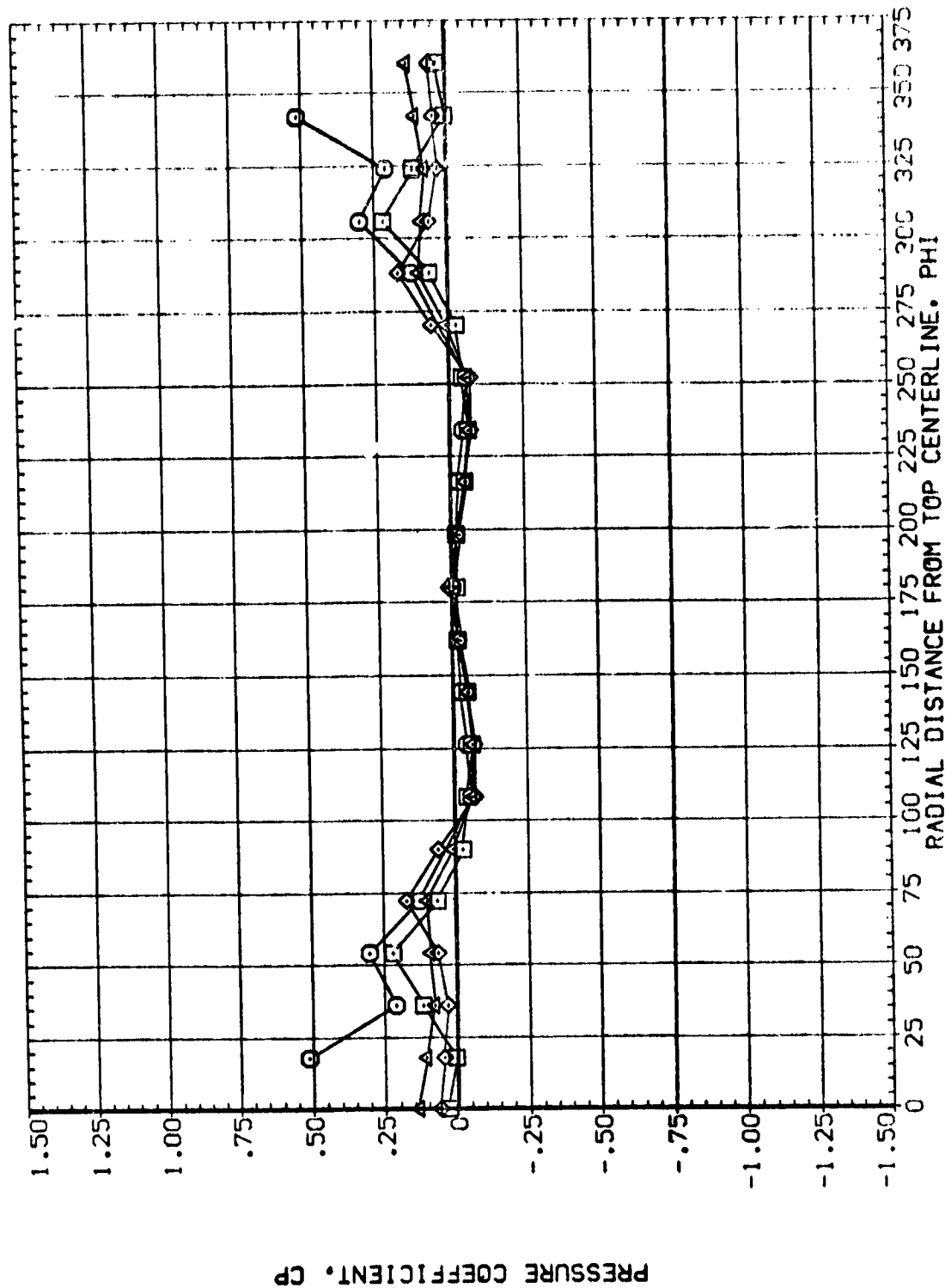
SQ. IN.  
IN.  
IN.  
IN.

BETA  
DELTA Z  
X-SRB

PARAMETRIC VALUES

.000 .000 .000  
CONFIG .140 RUDDER  
.000 .000 998.14C

90.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL

X/LT

ALPHA

MACH

REFERENCE DATA

PARAMETRIC VALUES

90.000  
.030  
.500

CONF IG  
RUDDER  
098111C

BETA  
DELTA Z  
X-SRB

SQ. IN.  
IN.  
IN.  
IN.

SREF  
LREF  
BREF  
XPRP  
YPRP  
ZPRP

3.500

-8.000

.708  
.776  
.844  
.912

□  
□  
◇  
△

.000  
.140  
.000

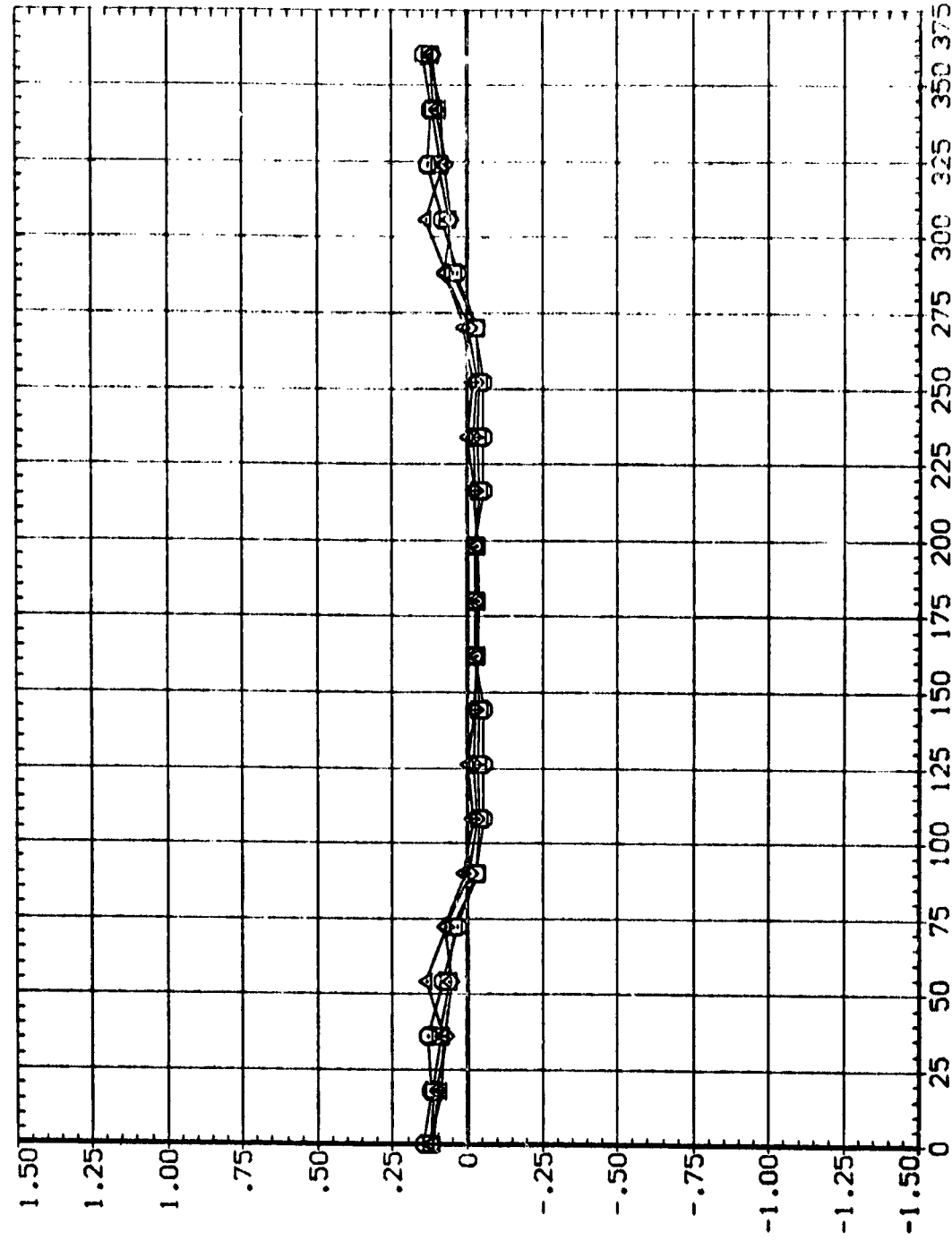
5.198  
5.313  
5.313  
2.549  
.000  
.000

3.500

-8.000

.708  
.776  
.844  
.912

□  
□  
◇  
△



RADIAL DISTANCE FROM TOP CENTERLINE, PHI

RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

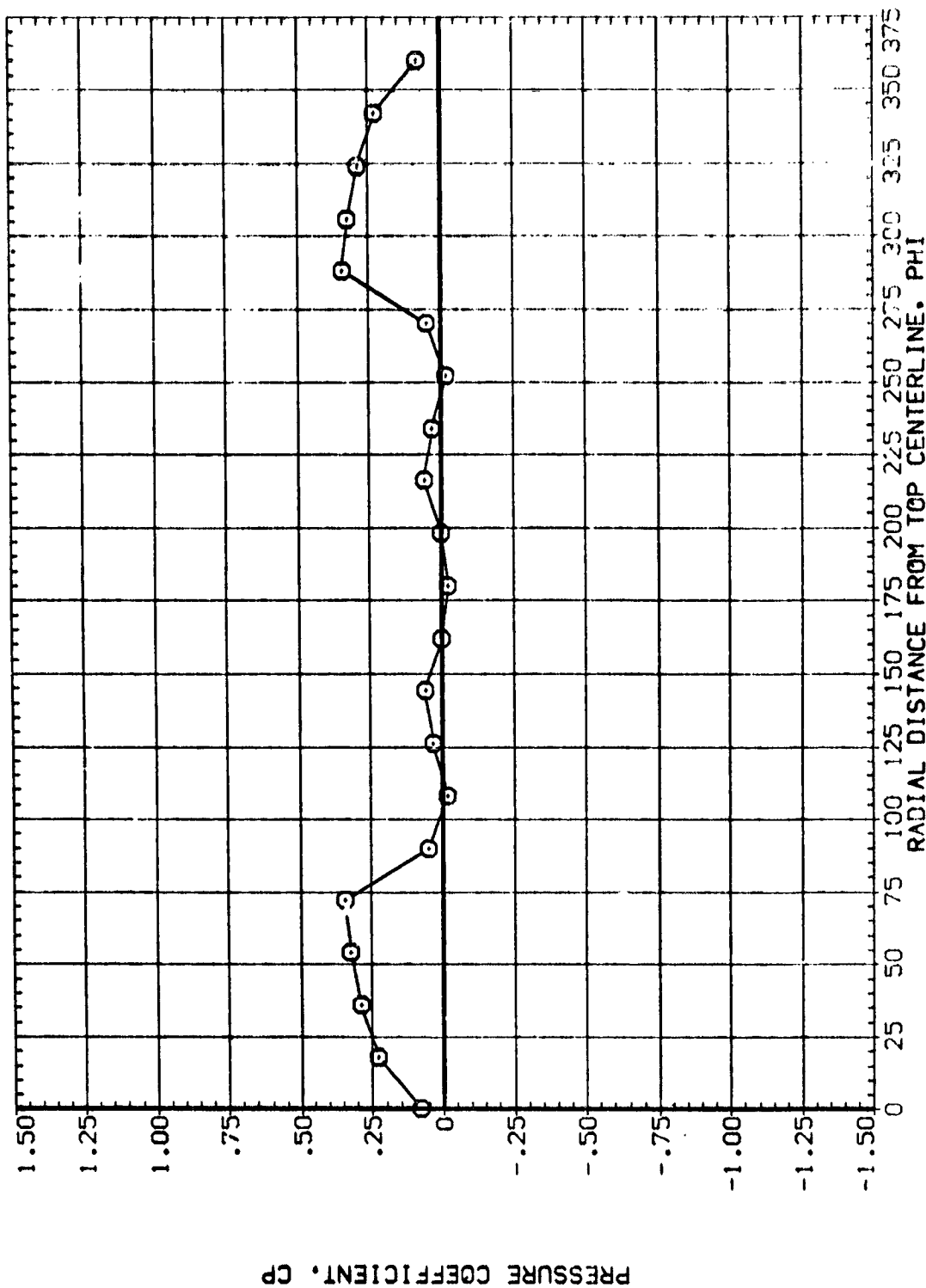
# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
O

X/Z T ALPHA MACH  
.984 -8.000 3.500

REFERENCE DATA  
SREF 6.199  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

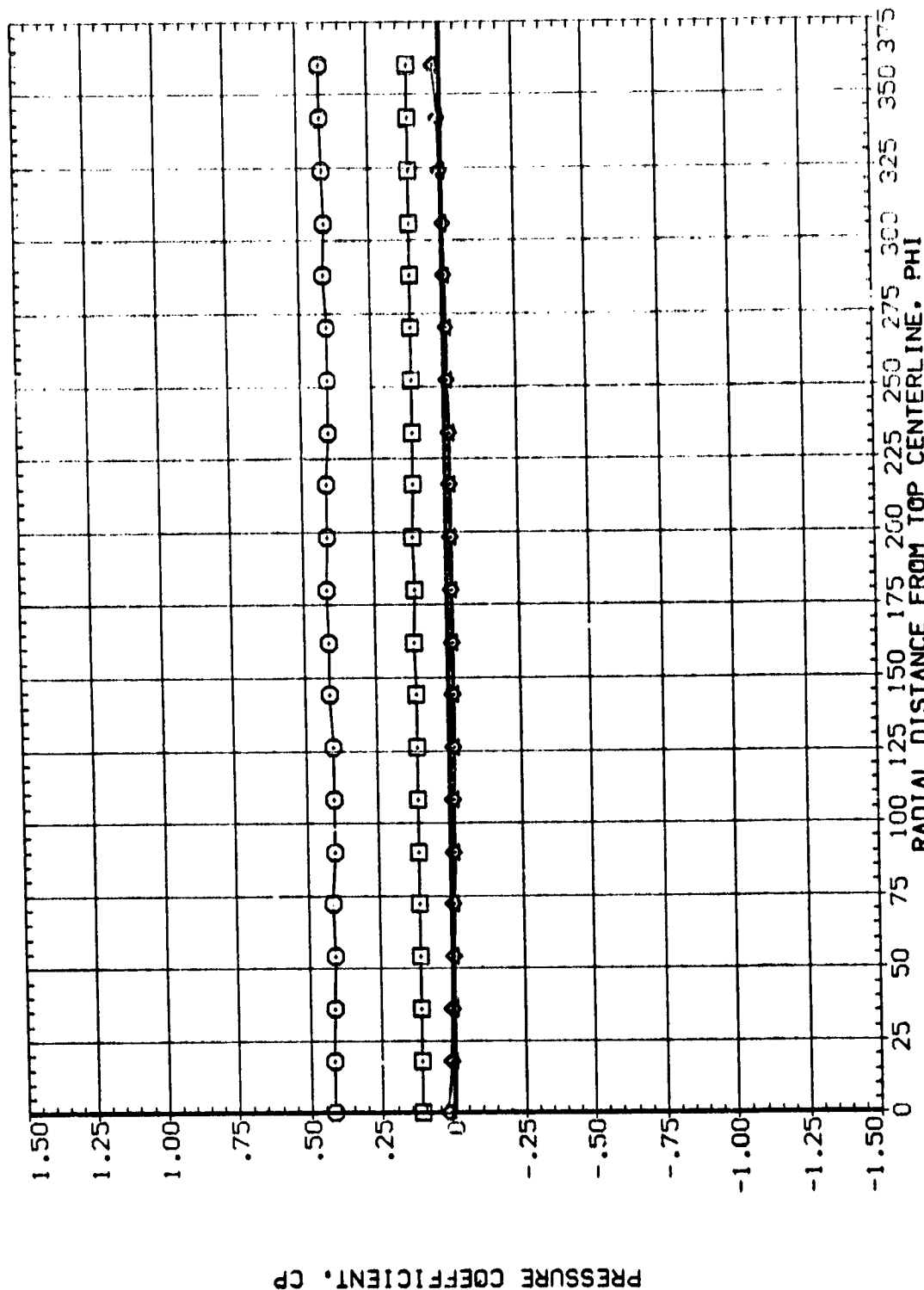
PARAMETRIC VALUES  
BETA DELTA Z  
X-SRB .000  
CONFIG .000  
RUDDER .000  
998 INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	YMRP	ZMRP	BETA	DELTAZ	X-SRB
○	.076	.000	3.500	6.198	5.313	5.313	2.549	.000	.000	.140	.000
□	.155										
◇	.220										
△	.235										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T'S S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL X/LT ALPHA MACH

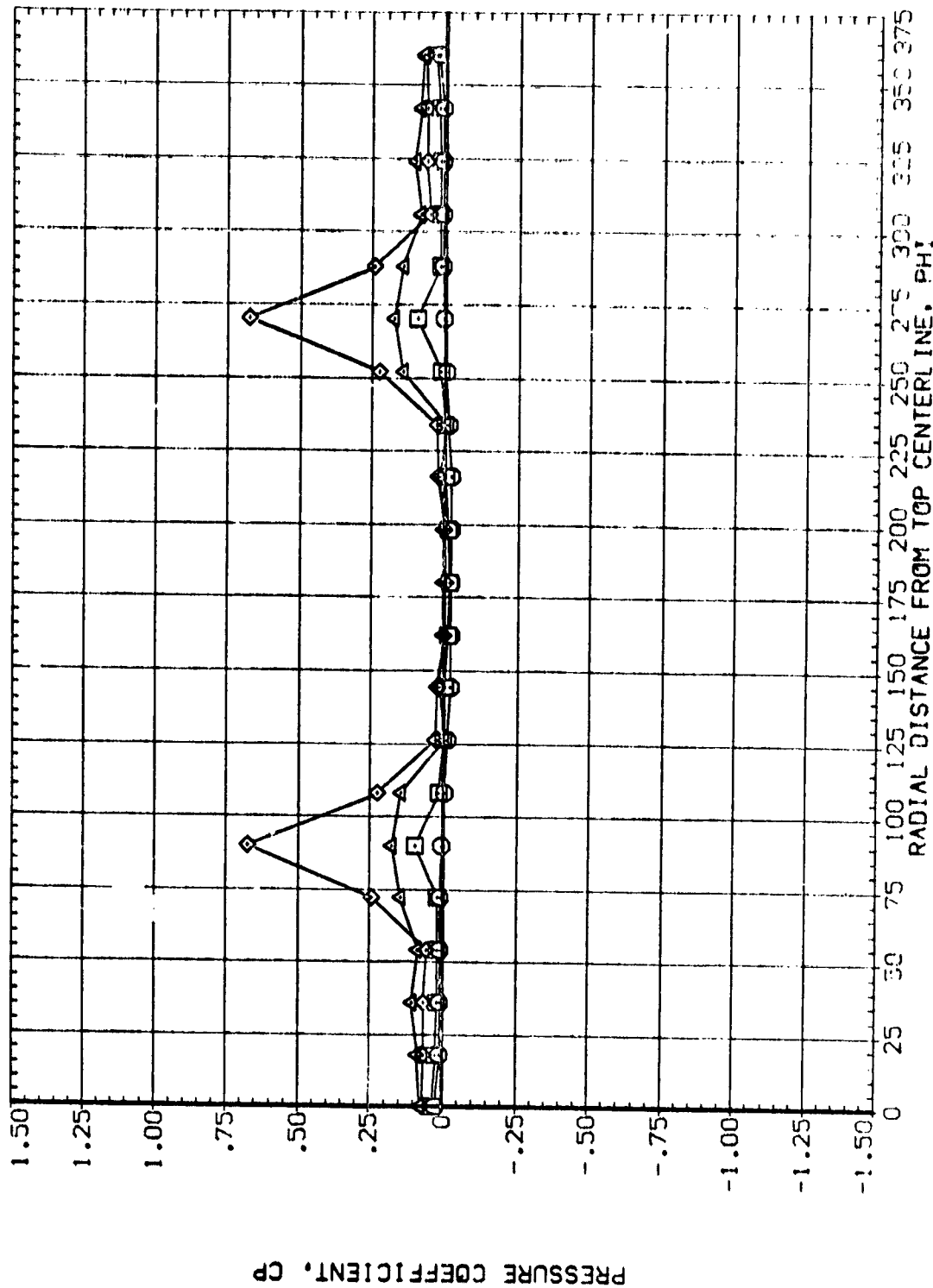
.271 .000 3.500  
.314  
.350  
.382

## REFERENCE DATA

SREF 6.198 SQ. IN.  
LREF 5.313 IN.  
BREF 5.313 IN.  
XMRP 2.549 IN.  
YMRP .000 IN.  
ZMRP .000 IN.

## PARAMETRIC VALUES

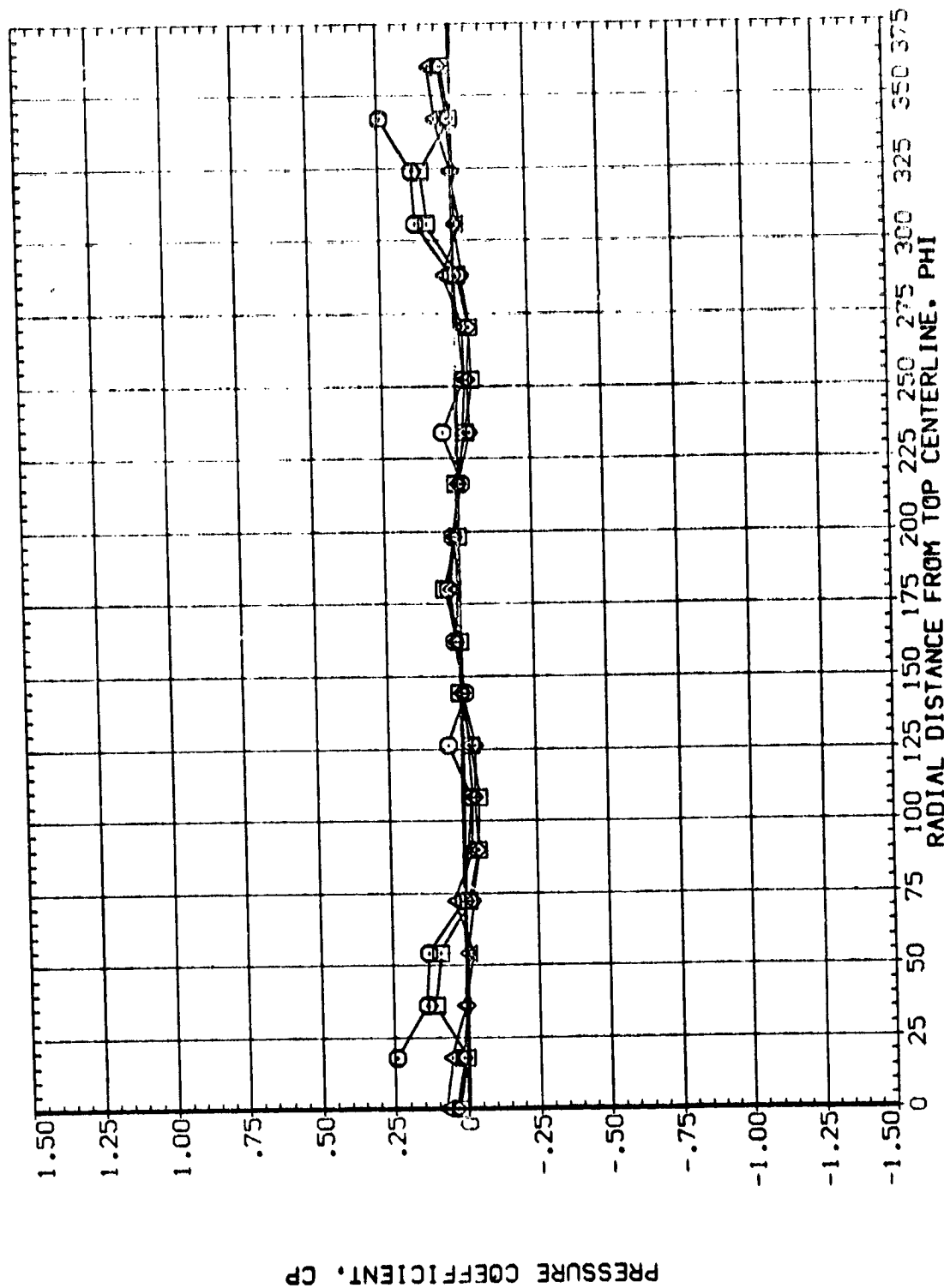
BETA .000 CONF T6 90.000  
DELTAZ .140 RUDDER .000  
X-SR8 .000 DF3INC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

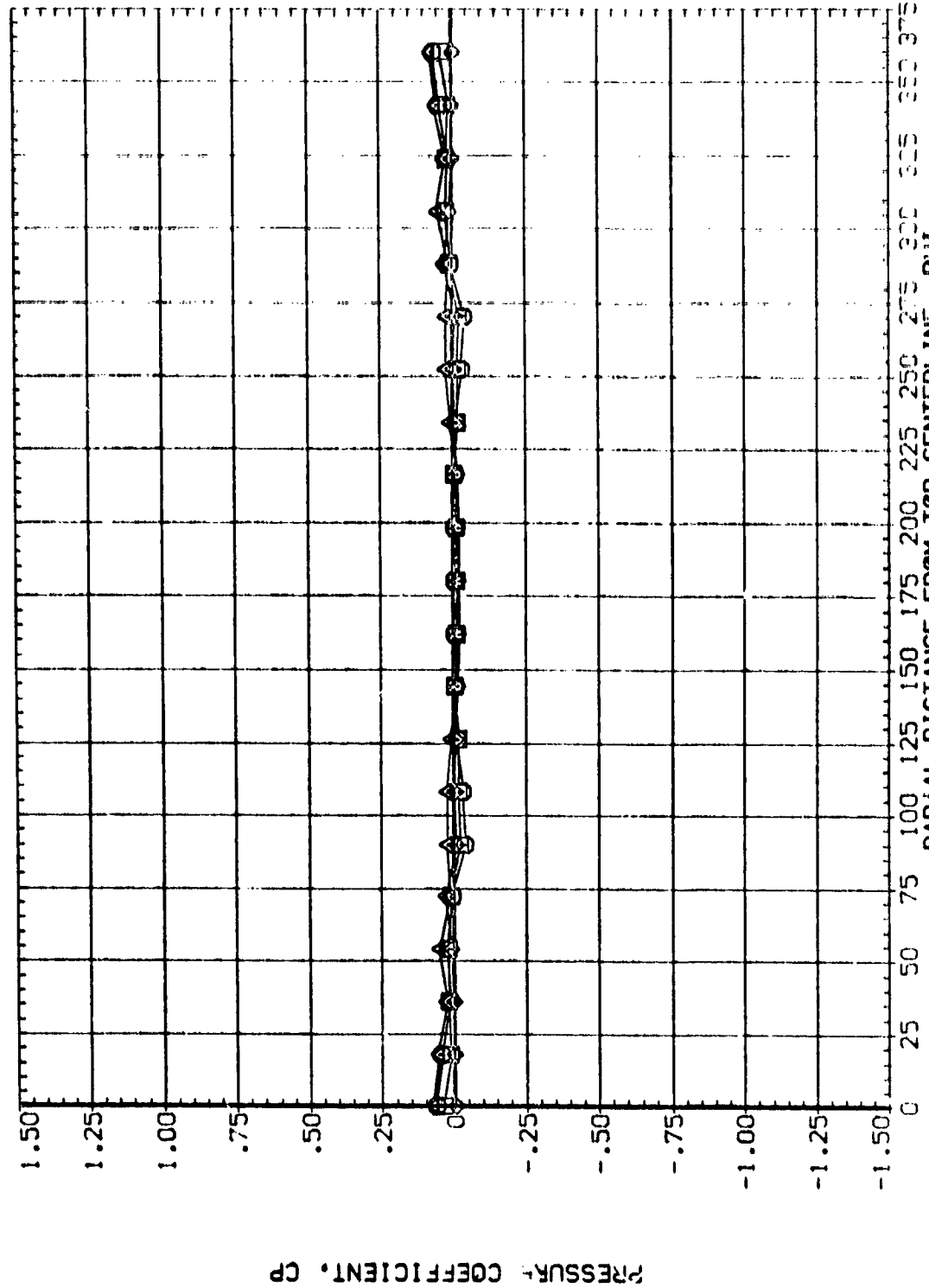
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	BETA	PARAMETRIC VALUES
○	.438	.000	3.500	SREF 6.198	.000	CONF 15 90.000
□	.506			LREF 5.313	.140	RUDER .300
◇	.573			BREF 5.313	.000	DRONE .500
△	.641			XMRP 2.549		
				YMRP .000		
				ZMRP .000		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

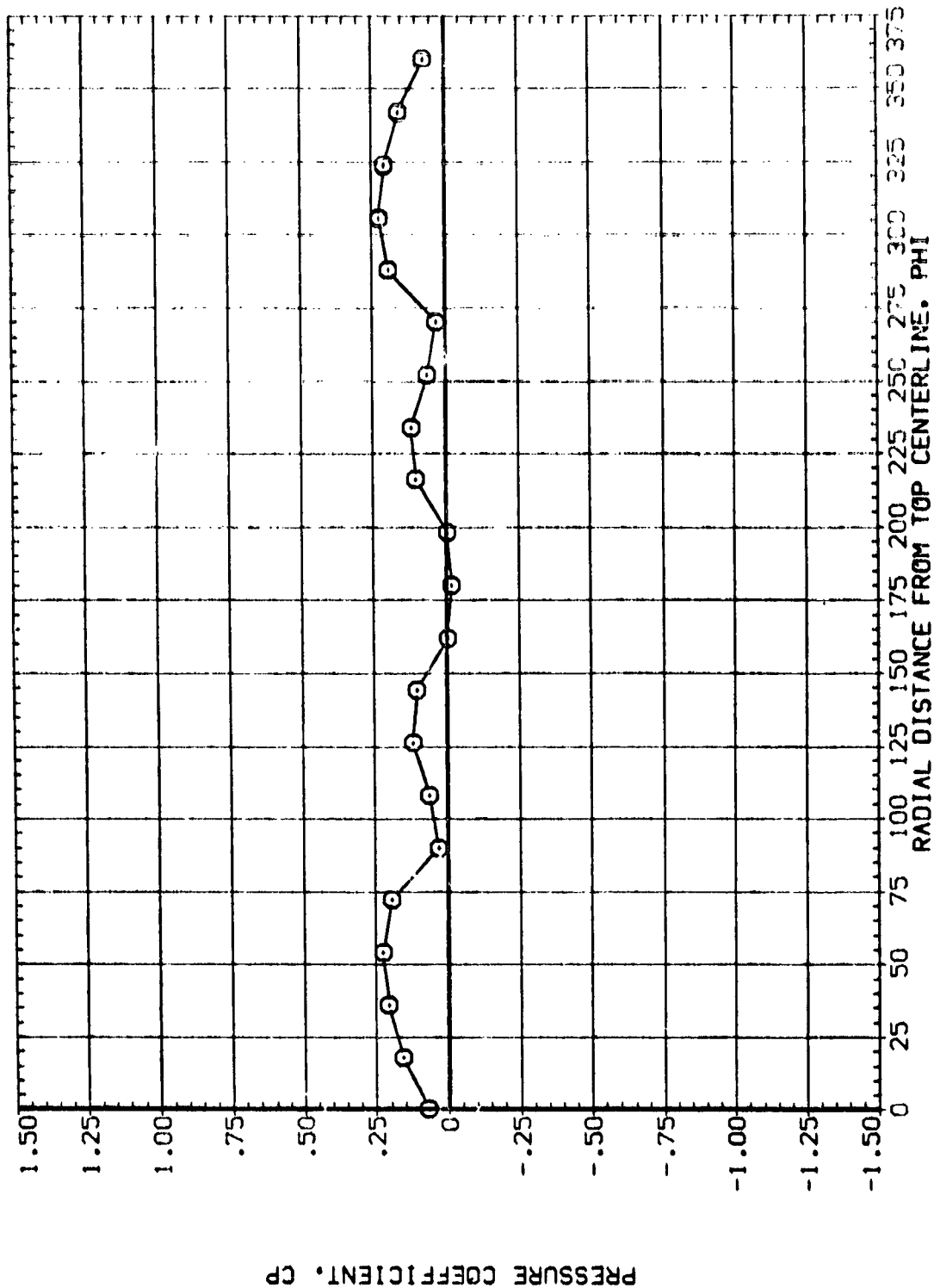
SYMBOL	X/RT		ALPHA		MACH		REFERENCE DATA		PARAMETRIC VALUES	
	0	1	0	1	0	1	SREF	6.198	50. IN.	BETA
□	.708	.000	3.500				UREF	5.313	IN.	DELTA Z
◇	.776						BREF	5.313	IN.	1-S88
△	.844						XREF	2.549	IN.	98.1°C
	.912						YREF	.000	IN.	
							ZREF	.000	IN.	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

SYMBOL	X/Y	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO IN.	BETA	CONFIG
O	.984	.000	3.500	LREF	5.313 IN.	DELTA Z	.000
				BREF	5.313 IN.	X-SRB	.000
				XPRP	2.549 IN.		.000
				YPRP	.000 IN.		.500

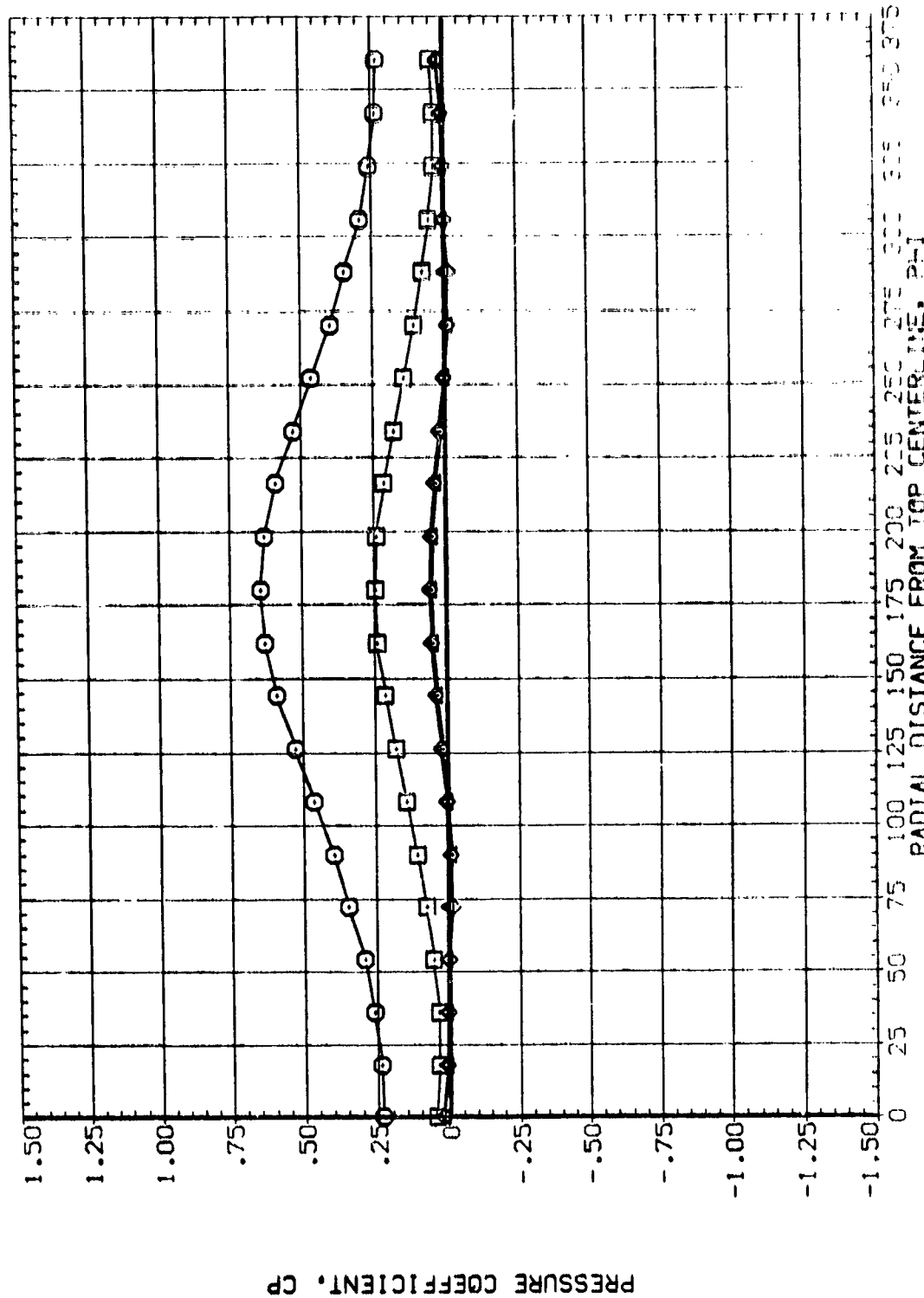


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

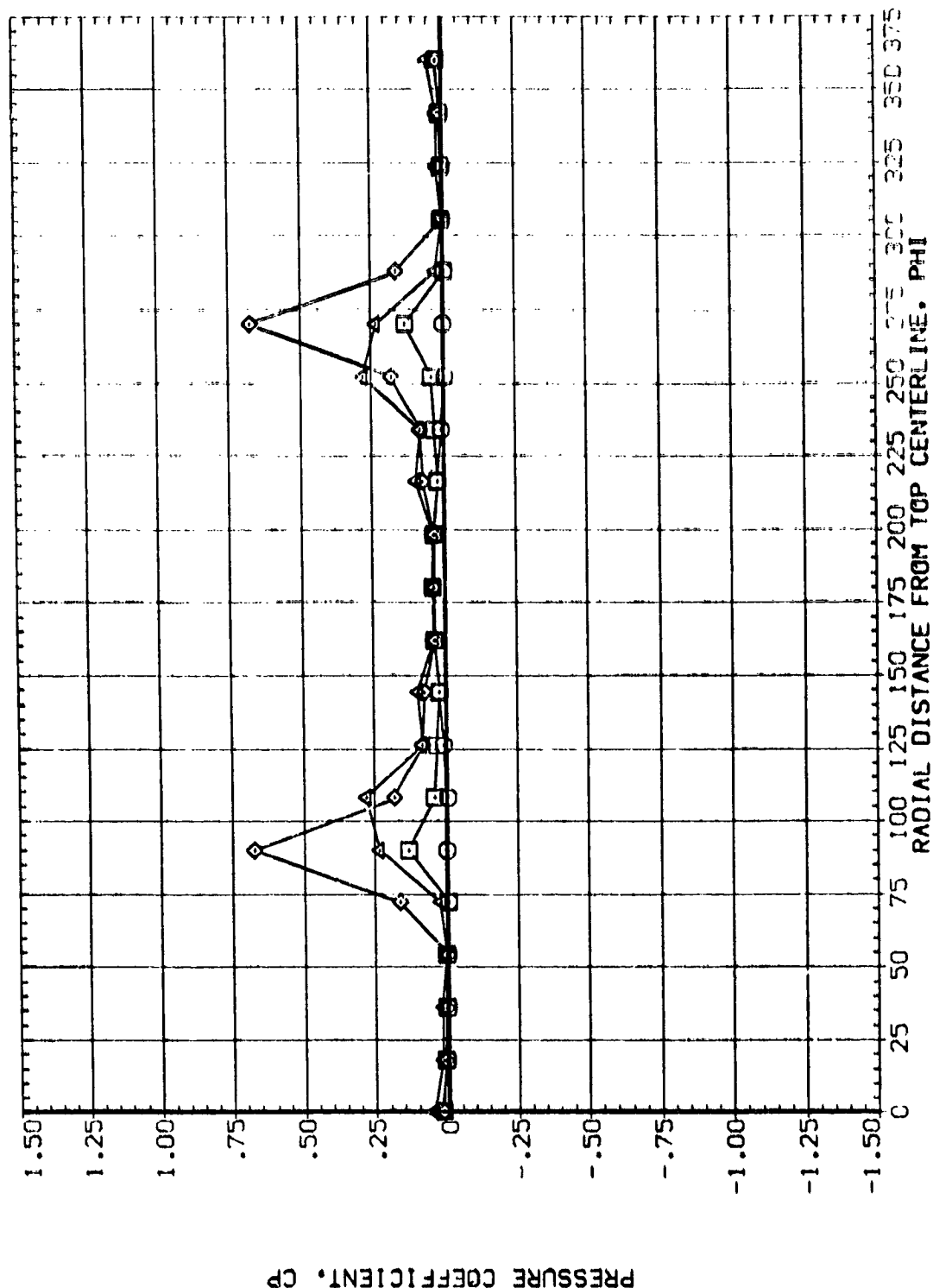
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	BETA	CS/15
○	.076	8.000	3.500	5.198	IN.	DELTA Z	R-001
□	.155			5.313	IN.	K-S98	R-002
◇	.220			2.549	IN.		R-003
△	.235			.000	IN.		R-004



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 03 U5 EXTERNAL TANK(A82T05)

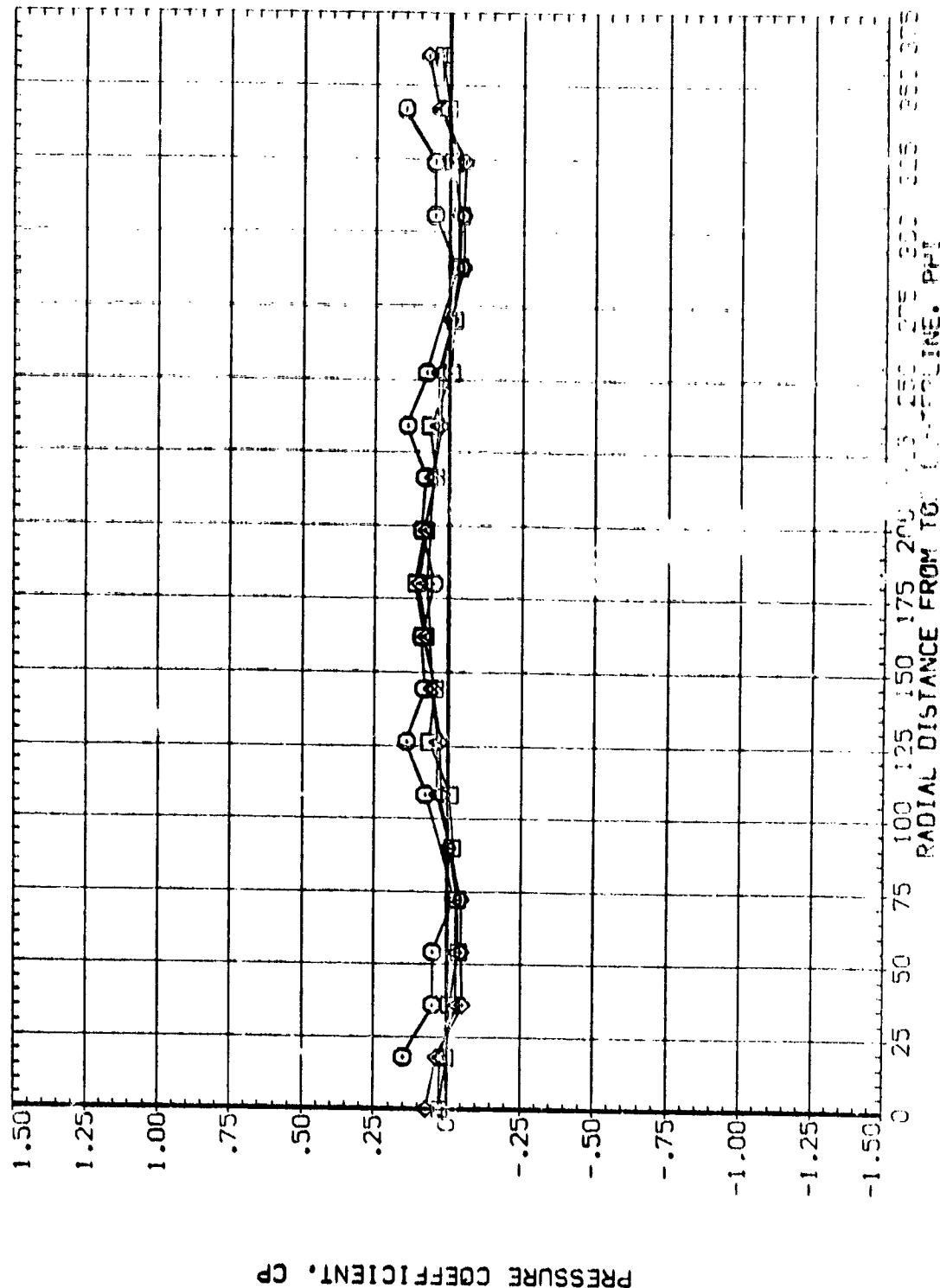
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	ZMRP	SO. IN.	BETA	COEFFIC	
○	.271	8.000	3.500	5.198	5.313	5.313	2.549	IN.	DELTAZ	.000	90.000
□	.314							IN.	X-SRS	.140	.000
◇	.350							IN.		.300	.500
△	.382							IN.		.000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82105)

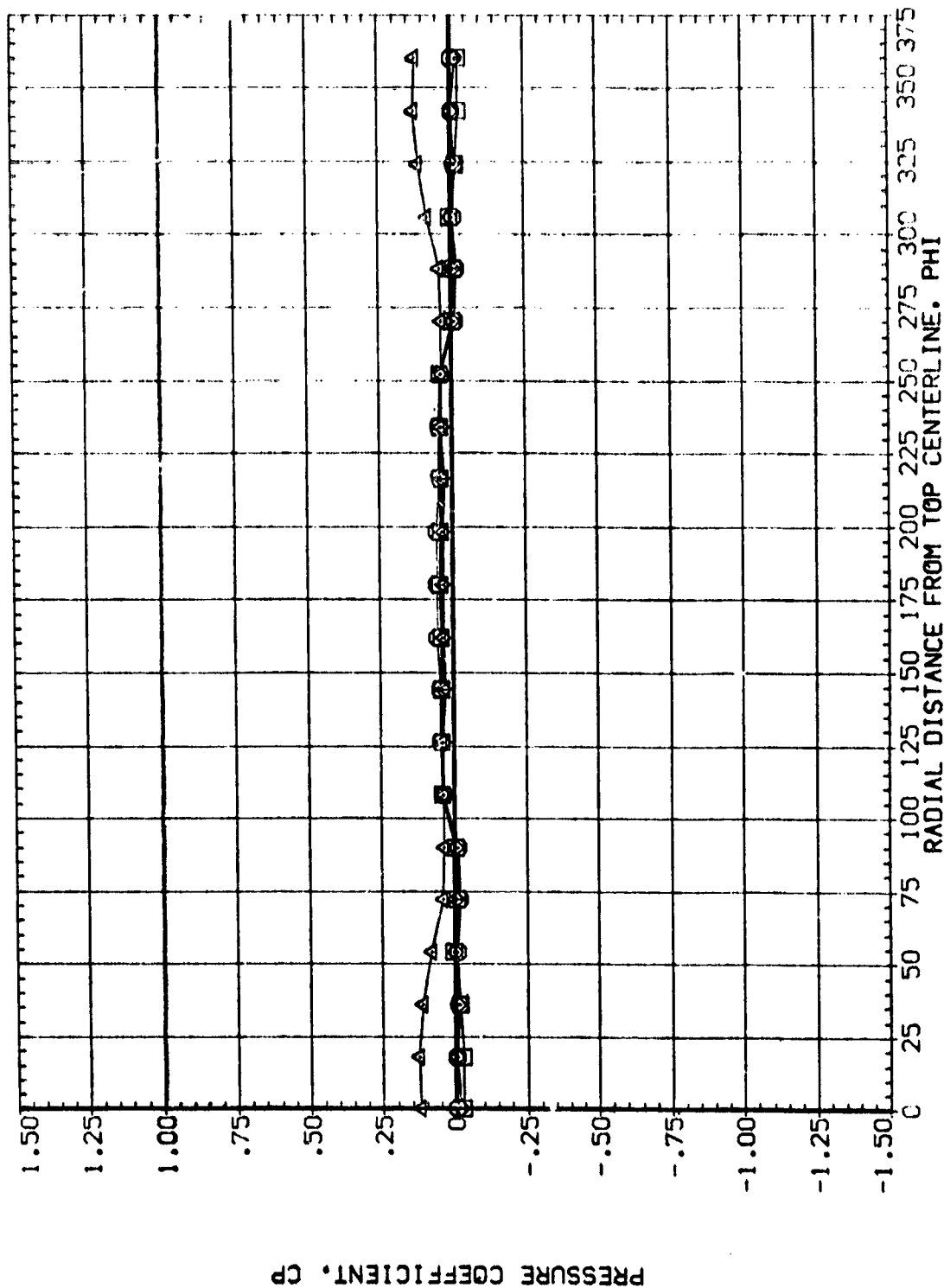
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
○	.438	8.000	3.500	SREF	6.198	BETA	.000	CONFIS	90.000
□	.506			LREF	5.313	DELTAZ	.140	CONFIS	.000
◇	.573			BREF	5.313	X-SRB	.000	CONFIS	.000
△	.641			XMRP	2.549				
				YMRP	.000				
				ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82105)

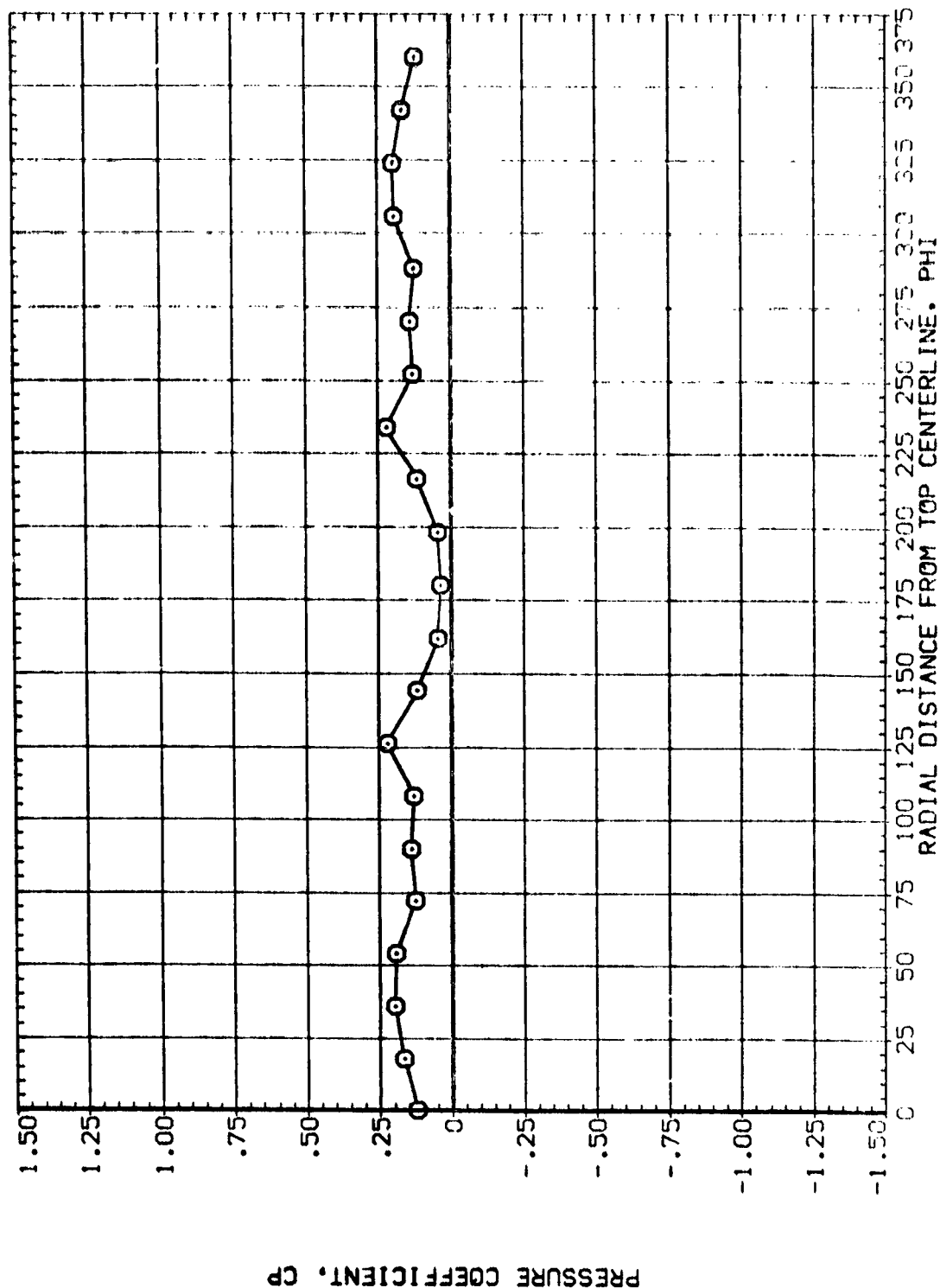
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	BC1*	DELTAZ	CONFIS	30.000
○	.708	8.000	3.500	6.198	5.313	5.313	2.548	.000	.140	.000	.000
□	.776									.500	
◇	.844										
△	.912										



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T05)

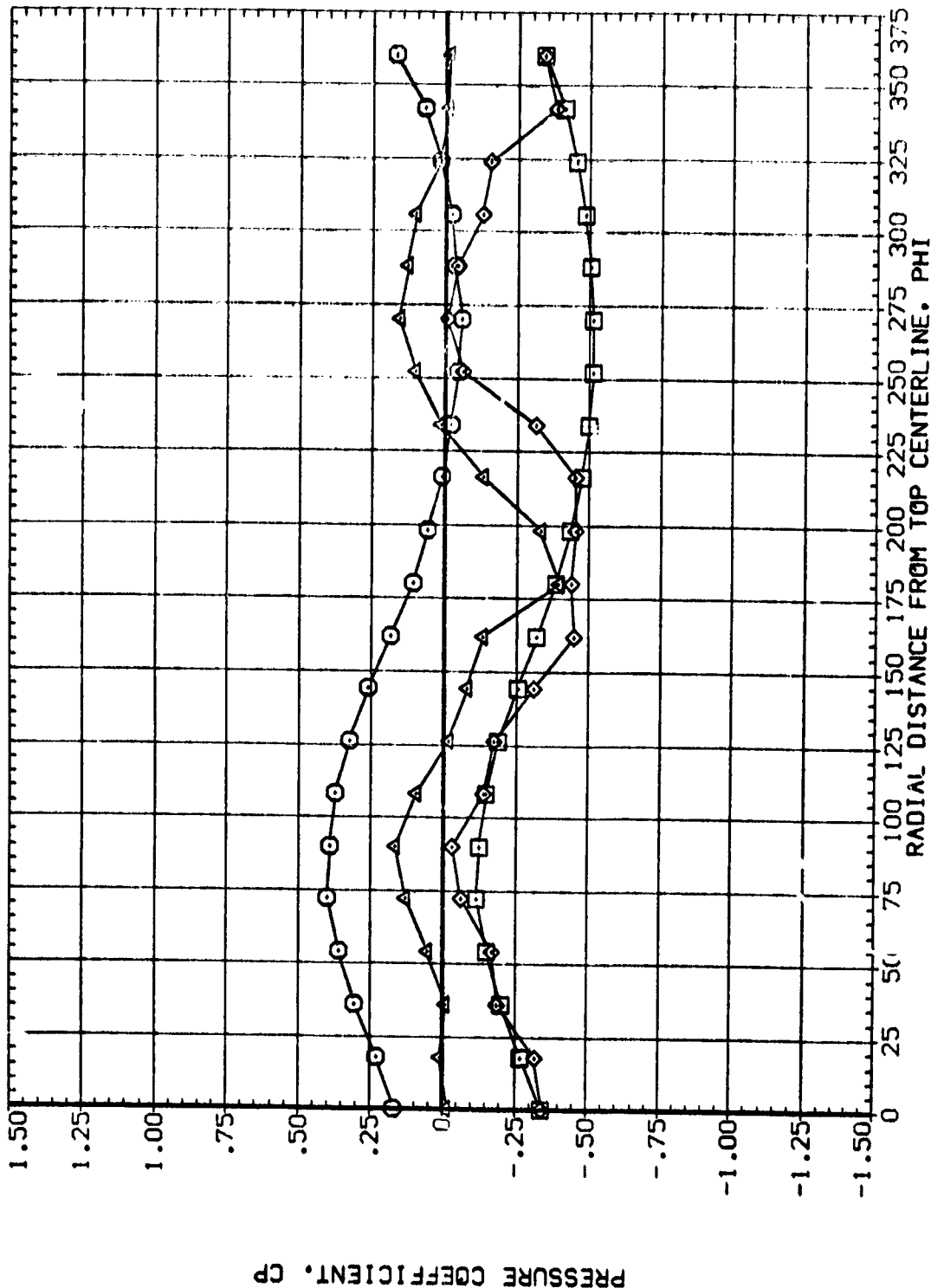
SYMBOL	X/LT	ALPHA	MACH	REFERENCE DATA	PARAMETRIC VALUES
0	.984	8.000	3.500	SREF 5.198 LREF 5.313 BREF 5.313 XMRP 2.549 YMRP .070 ZMRP .000	BETA .000 DELTAZ .140 X-SRB .000 URBINC .500
				SQ. IN. IN. IN. IN.	CONFIS 90.000 RUEBER .000 URBINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES		
				SREF	LREF	BREF	XMPP	YMRP	ZMRP	IN.
○	.076	-8.000	.900	6.198	5.313	5.313	2.549	.000	.000	IN.
□	.155									IN.
◇	.220									IN.
△	.235									IN.
										IN.



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL  
 ○  
 □  
 ◇

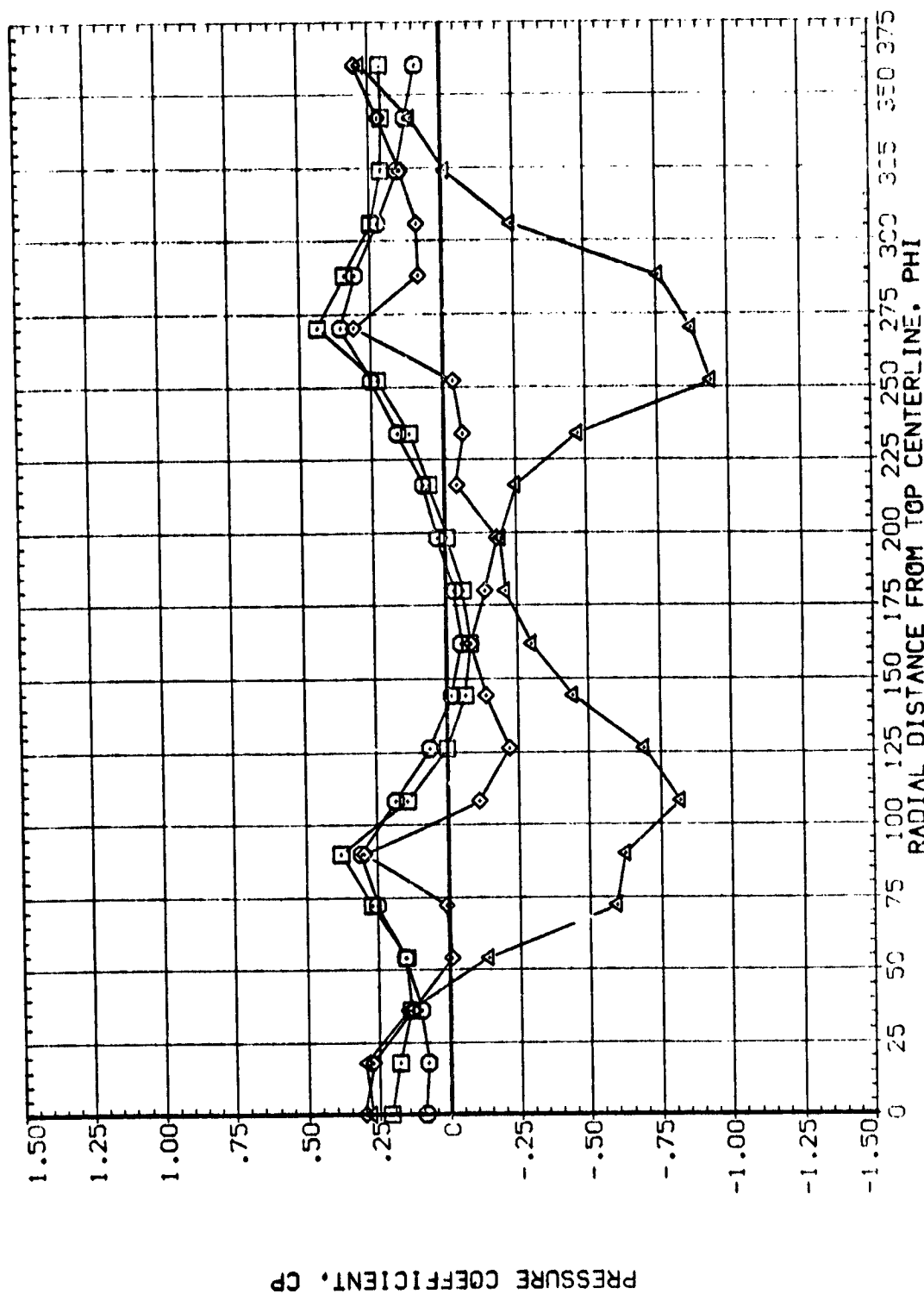
X/LT    BETA    MACH  
 .271    -8.000    .900  
 .314  
 .360  
 .382

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

50. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 A-SRB

PARAMETRIC VALUES  
 .000 CD F15  
 .140 RUDDER  
 .000 DPG INC  
 90.000  
 .000  
 .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

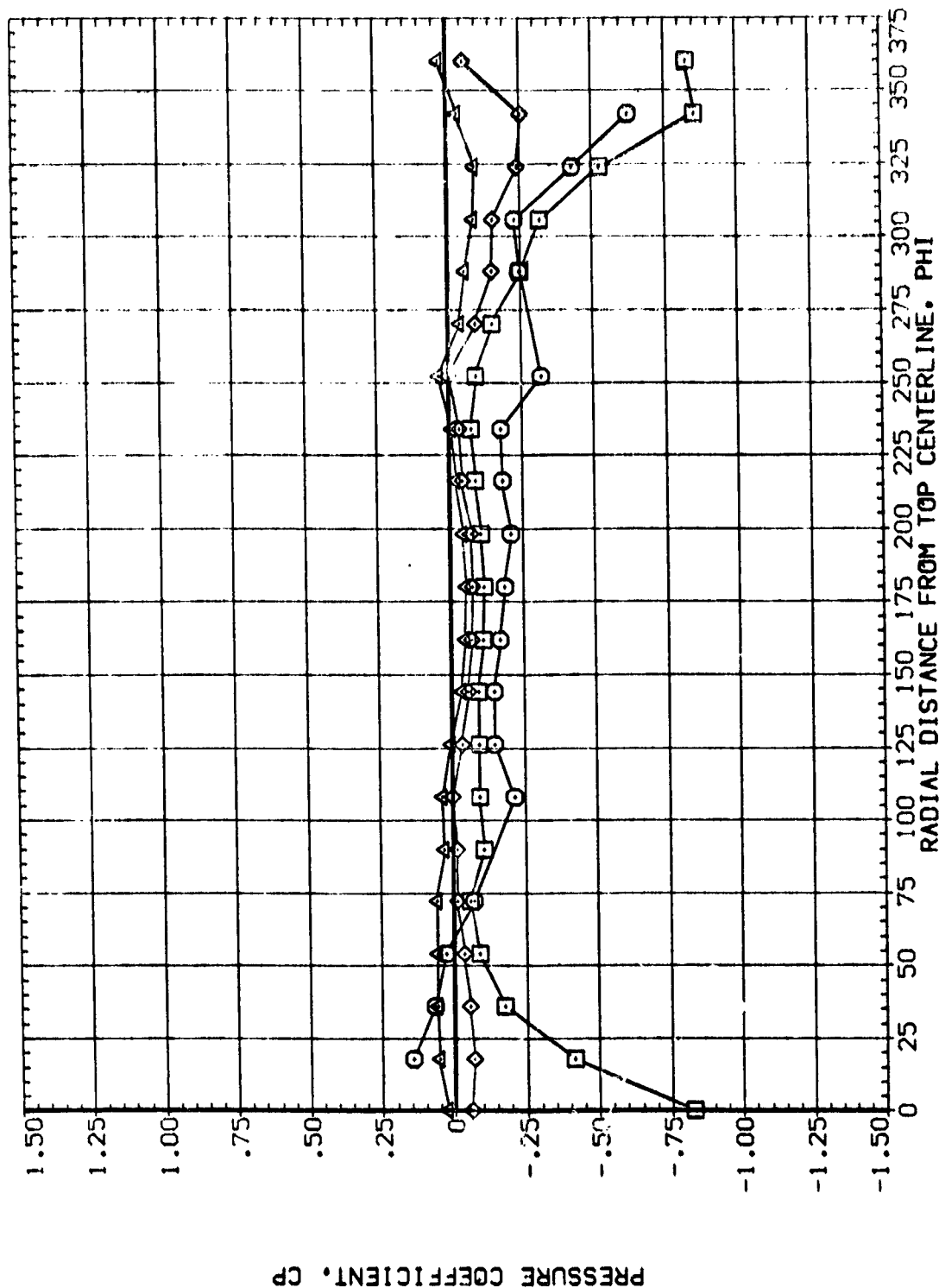
# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL

X/LT .438  
BETA -8.000  
MACH .900

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
YREF 2.549  
ZREF .000

PARAMETRIC VALUES  
ALPHA .000  
DELTAZ .140  
X-SRB .000  
DSBINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL

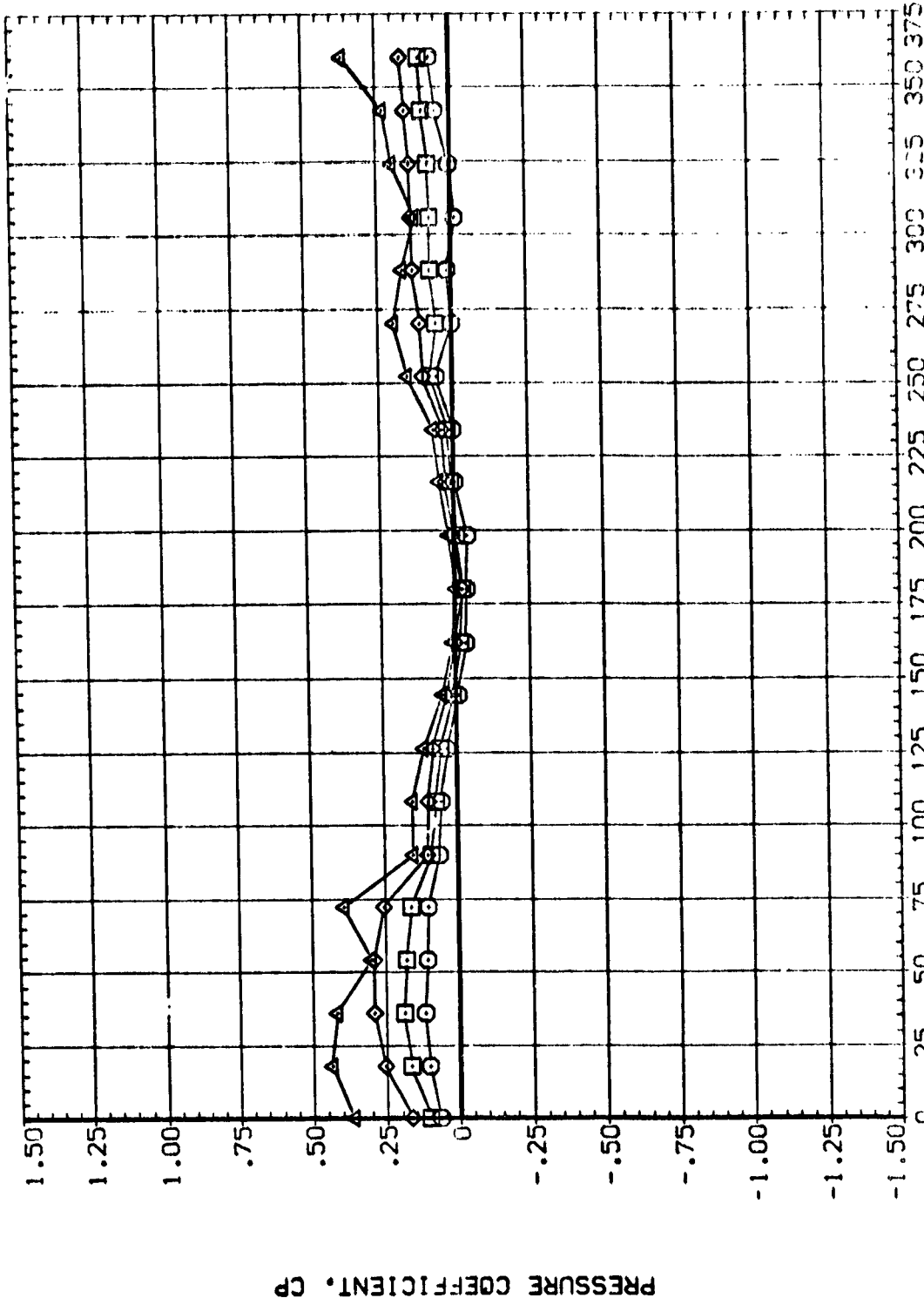
ALT BETA MACH

PARAMETRIC VALUES

REFERENCE DATA

ALPHA DELTA Z X-SRB

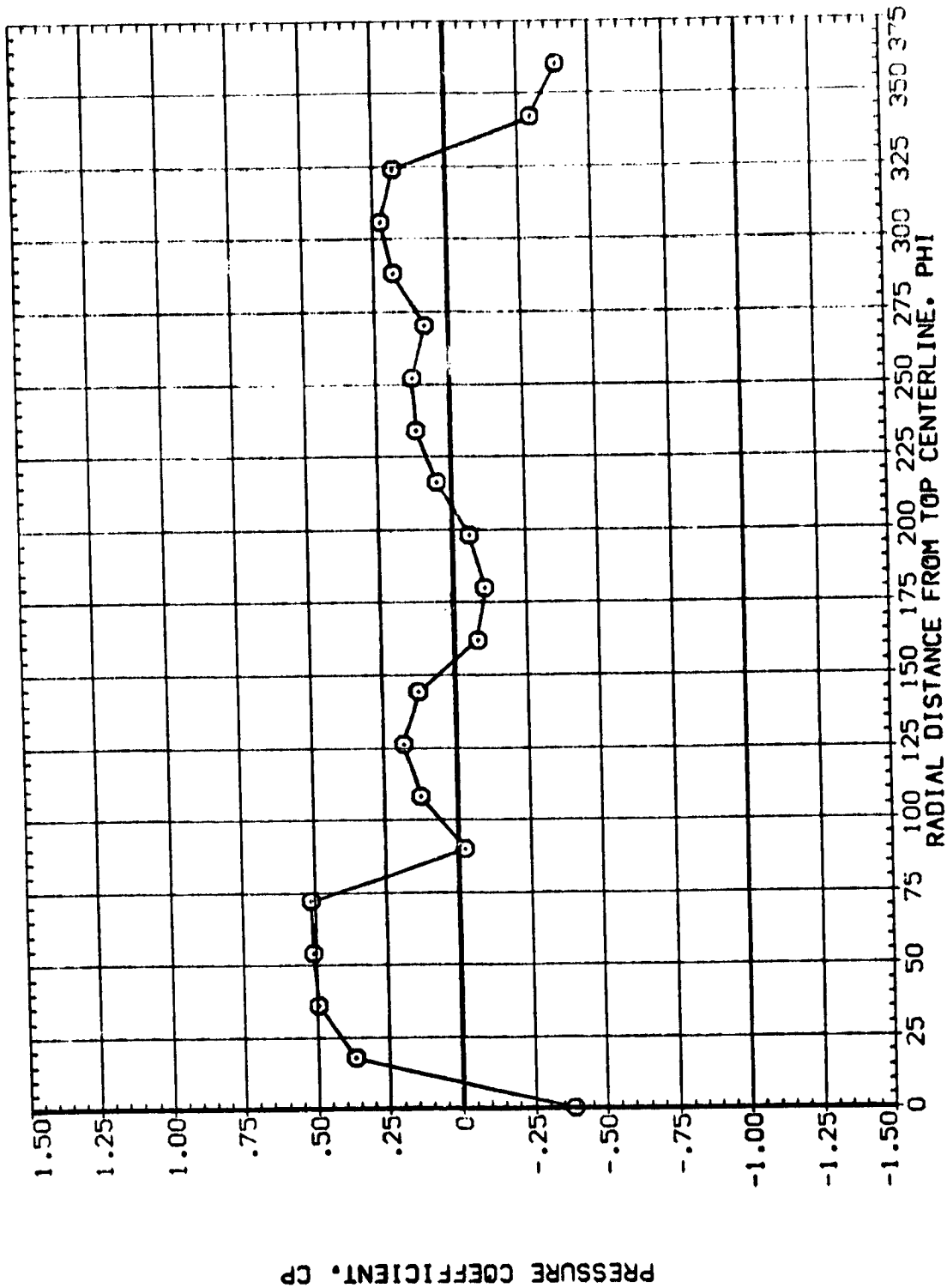
CONFUG PLDGER 39874C



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	XULT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SG. IN.	ALPHA	DELTA Z	X-SRB
0	.984	-8.000	.900	6.158	5.313	5.313	2.549	IN.	.000	.140	.000
								IN.			.500
								IN.			
								IN.			

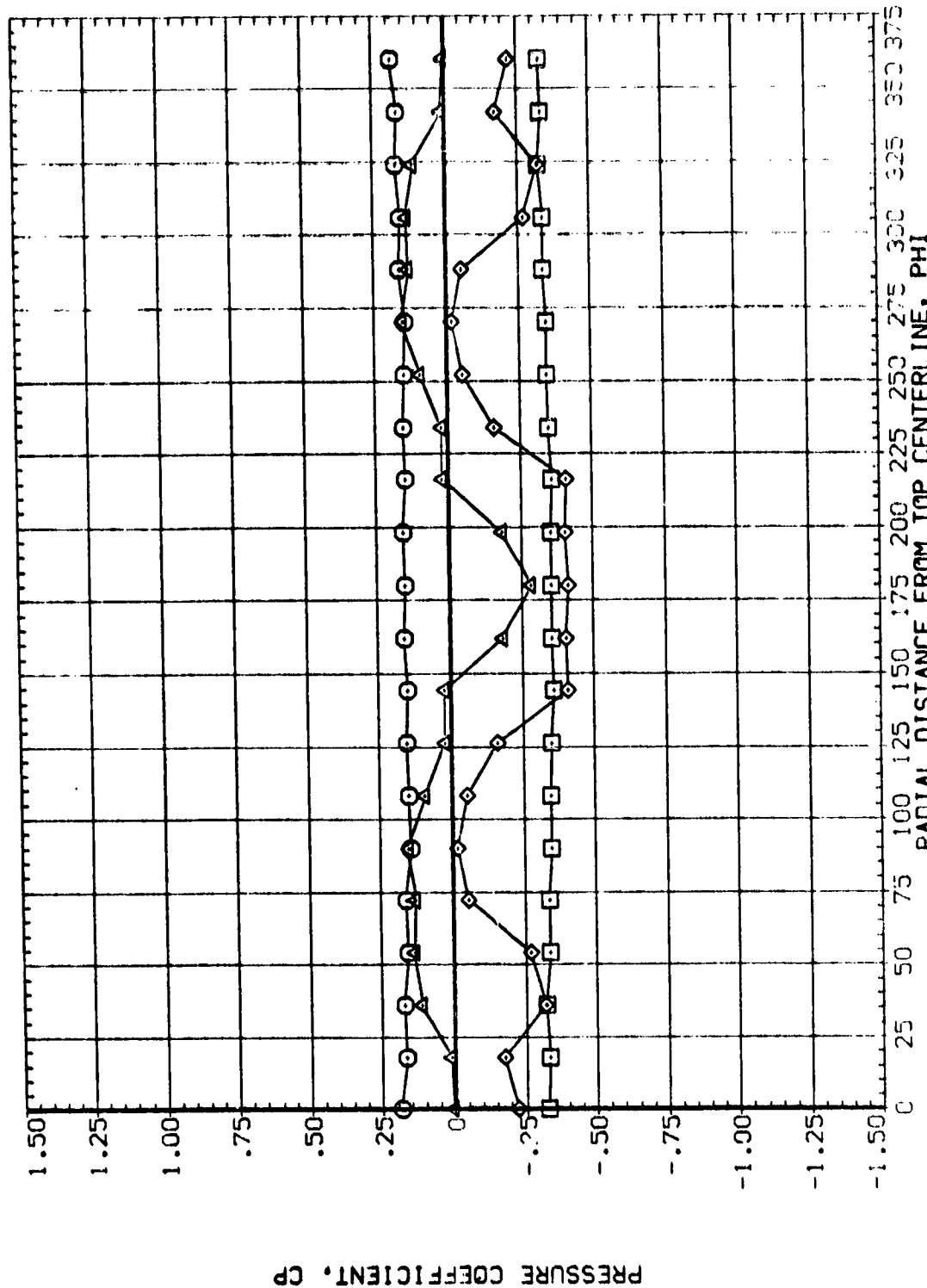


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	X/RT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SREF	6.198	ALPHA	CONFIS	30.000	
○	.076	.000	.900	LREF	5.313	DELTA Z	.000	.000	
□	.155			BREF	5.313	RUDDER	.140	.000	
◇	.220			XMRP	2.549	Y-SRB	.000	.000	
△	.235			YMRP	.000				
				ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106)

SYMBOL  
◇  
□  
○  
△

X/LT .271  
.314  
.350  
.382

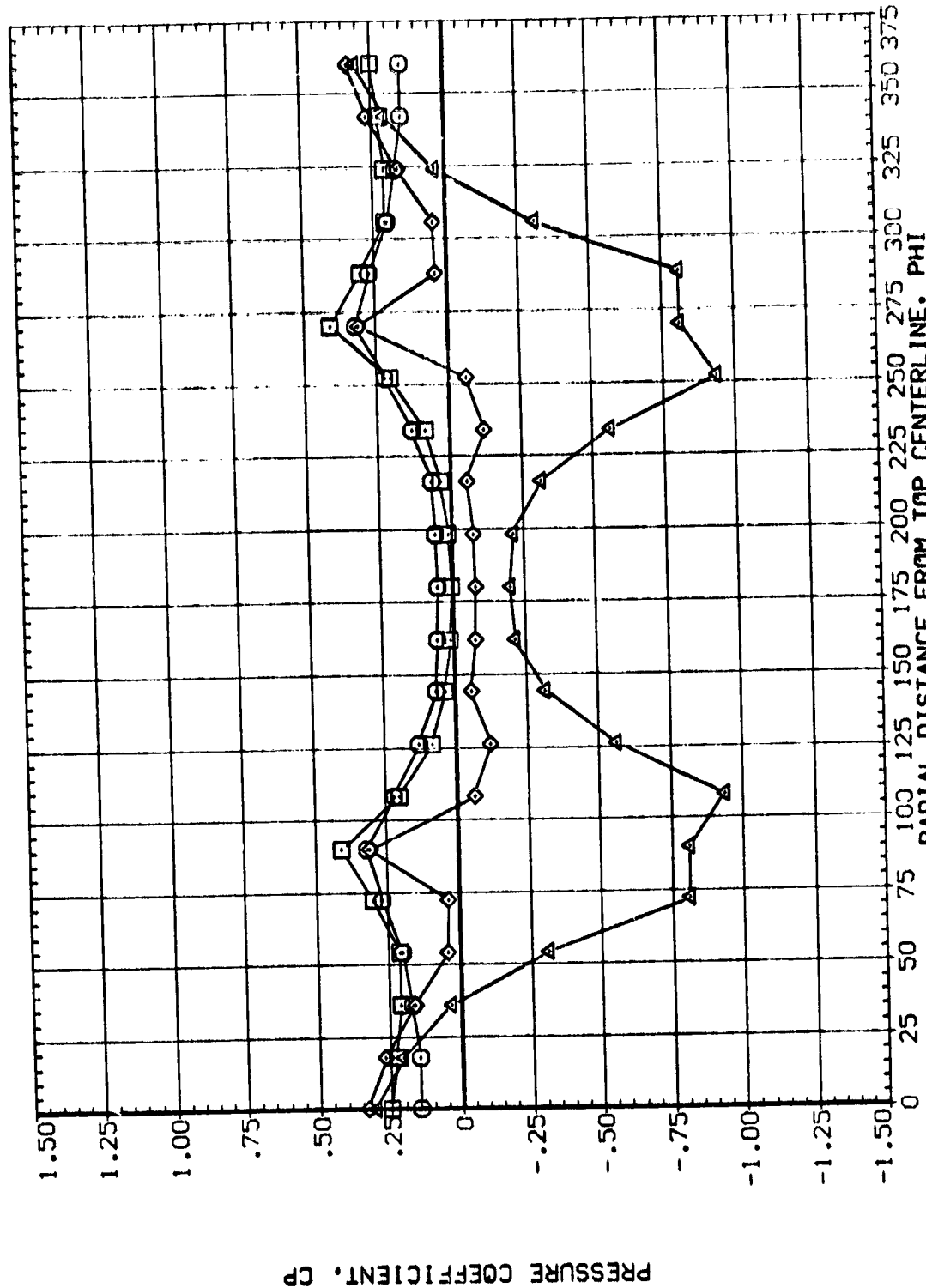
BETA .000  
.000  
.000  
.000

MACH .900  
.900  
.900  
.900

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

ALPHA  
DELTA Z  
X-SRB

PARAMETRIC VALUES  
.000  
.000  
.000  
.000  
.000  
.000  
.000

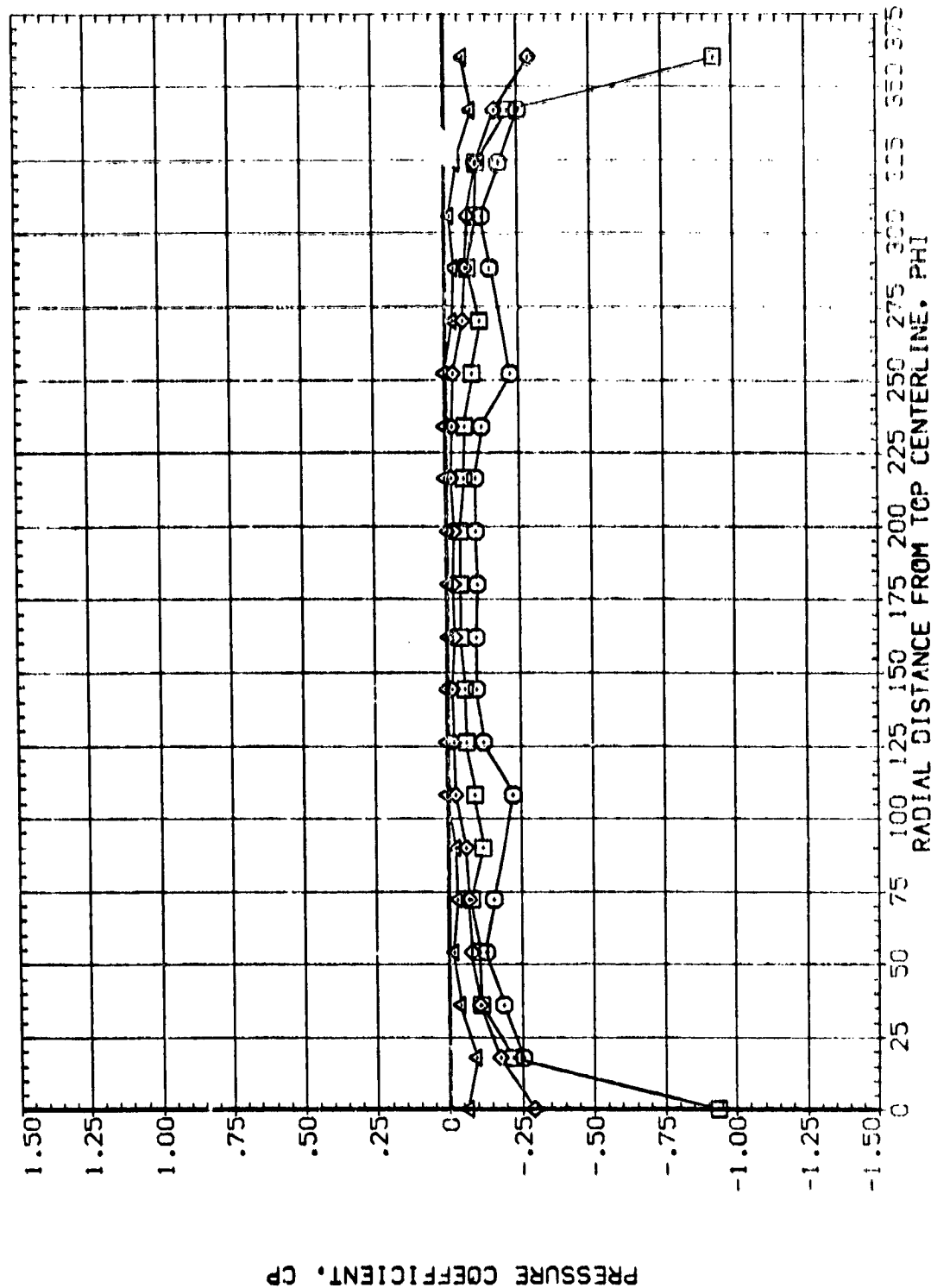


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 US EXTERNAL TANK (A82106)

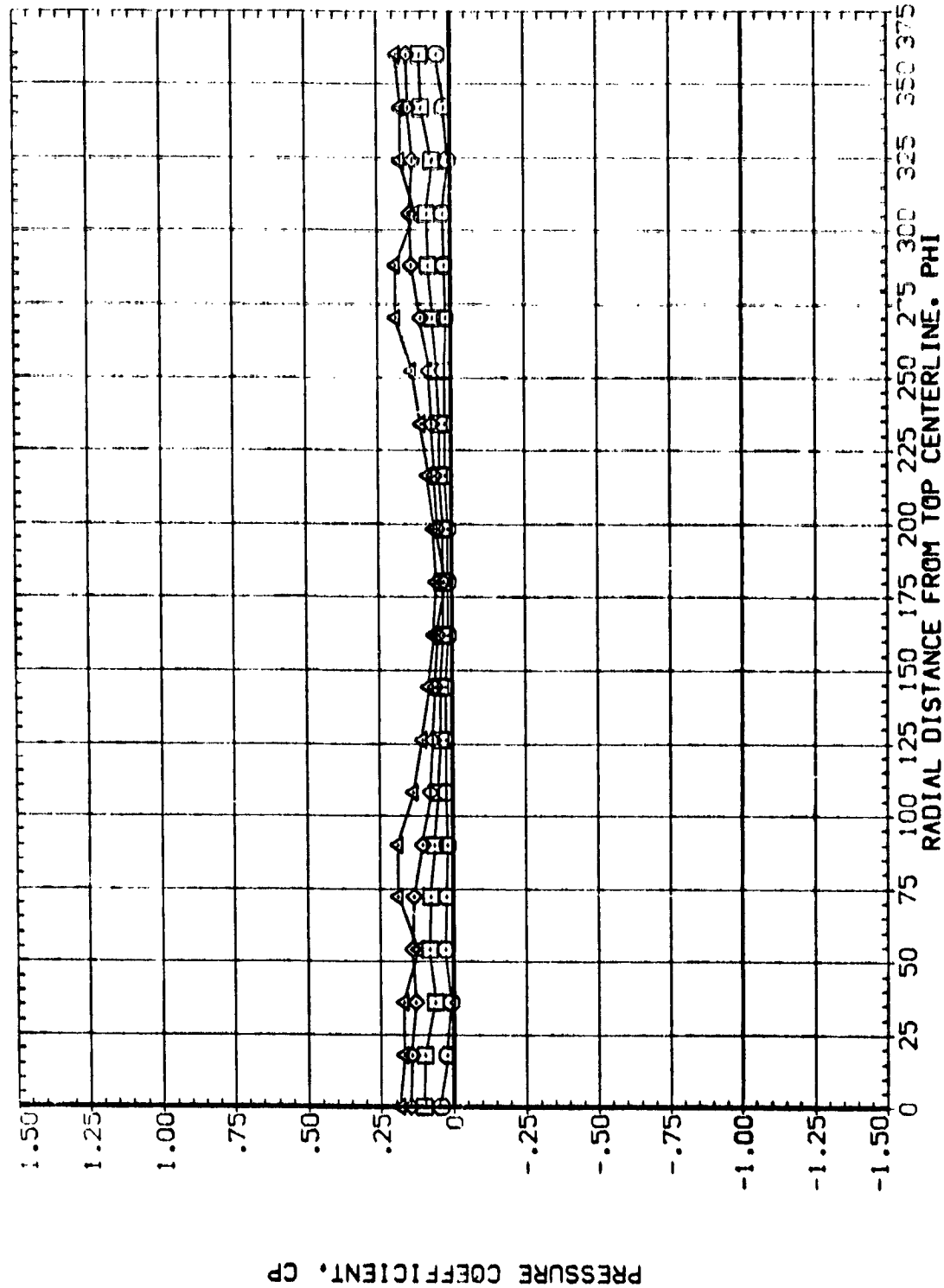
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SPCF	LRFF	BREF	XMRP	SO. IN.	ALPHA	CONFIS	
○	.438	.000	.900	5.198	5.313	5.313	2.549	IN.	DEL * 2	.000	90.000
◇	.506							IN.	X-SRB	.40	.000
△	.573							IN.		.000	.500
▽	.641							IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 US

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82102)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		WEIR VALUES	
				SPREF	SG.IN.	W	W
000	.708	.000	.900	5.196	5.196	0.000	0.000
000	.776	.000	.900	5.313	5.313	0.000	0.000
000	.844	.000	.900	2.549	2.549	0.000	0.000
000	.912	.000	.900	2.549	2.549	0.000	0.000

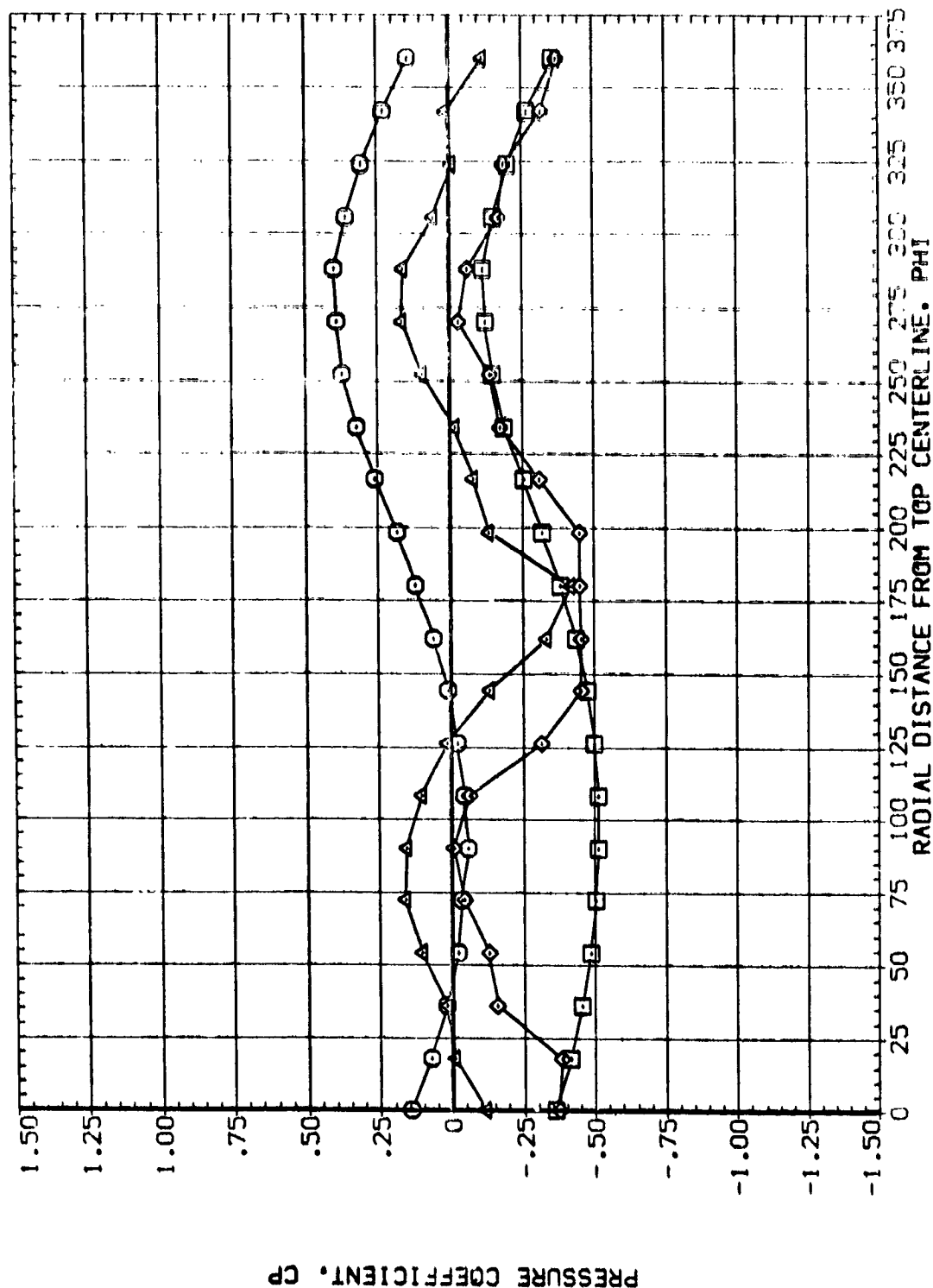


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		GEOMETRIC VALUES	
				SPEC	SO. IN.	ALPHA	90.000
○	.076	8.000	.900	LRREF	IN.	DELTA Z	.000
□	.155			BRREF	IN.	1-SEE	.000
◇	.220			XMRP	IN.		.500
△	.255			YMRP	IN.		
				ZMRP	IN.		

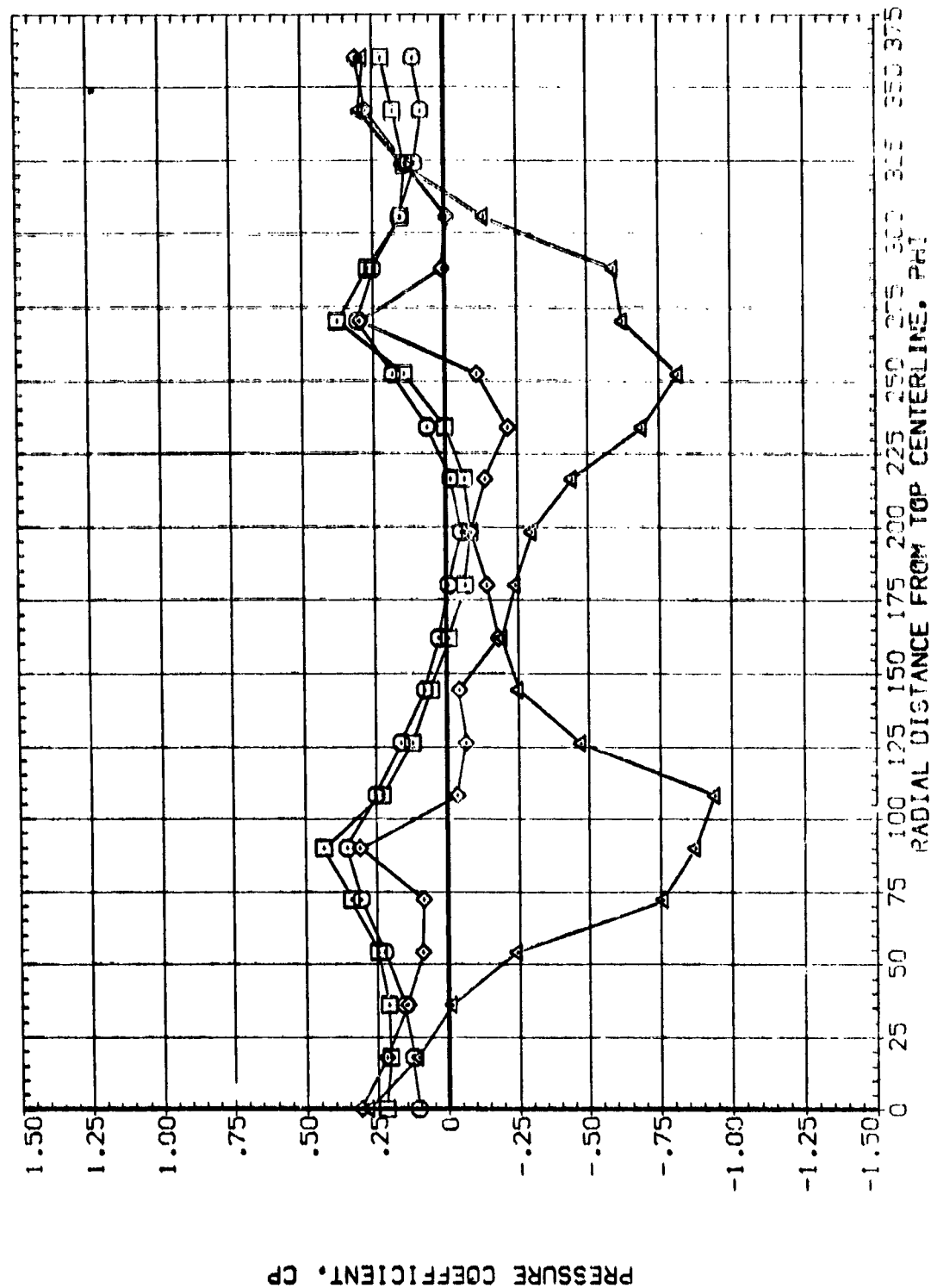


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 US EXTERNAL TANK(A32T06)

SYMBOL	X/L	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	VMRP	50. IN.	ALPHA	DELTA Z	CONFIS
◇	.271	8.000	.900	6.198	5.313	5.313	2.549	IN.	0.00	0.00	0.00
□	.314							IN.	0.00	0.00	0.00
△	.350							IN.	0.00	0.00	0.00
	.382							IN.	0.00	0.00	0.00



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 US

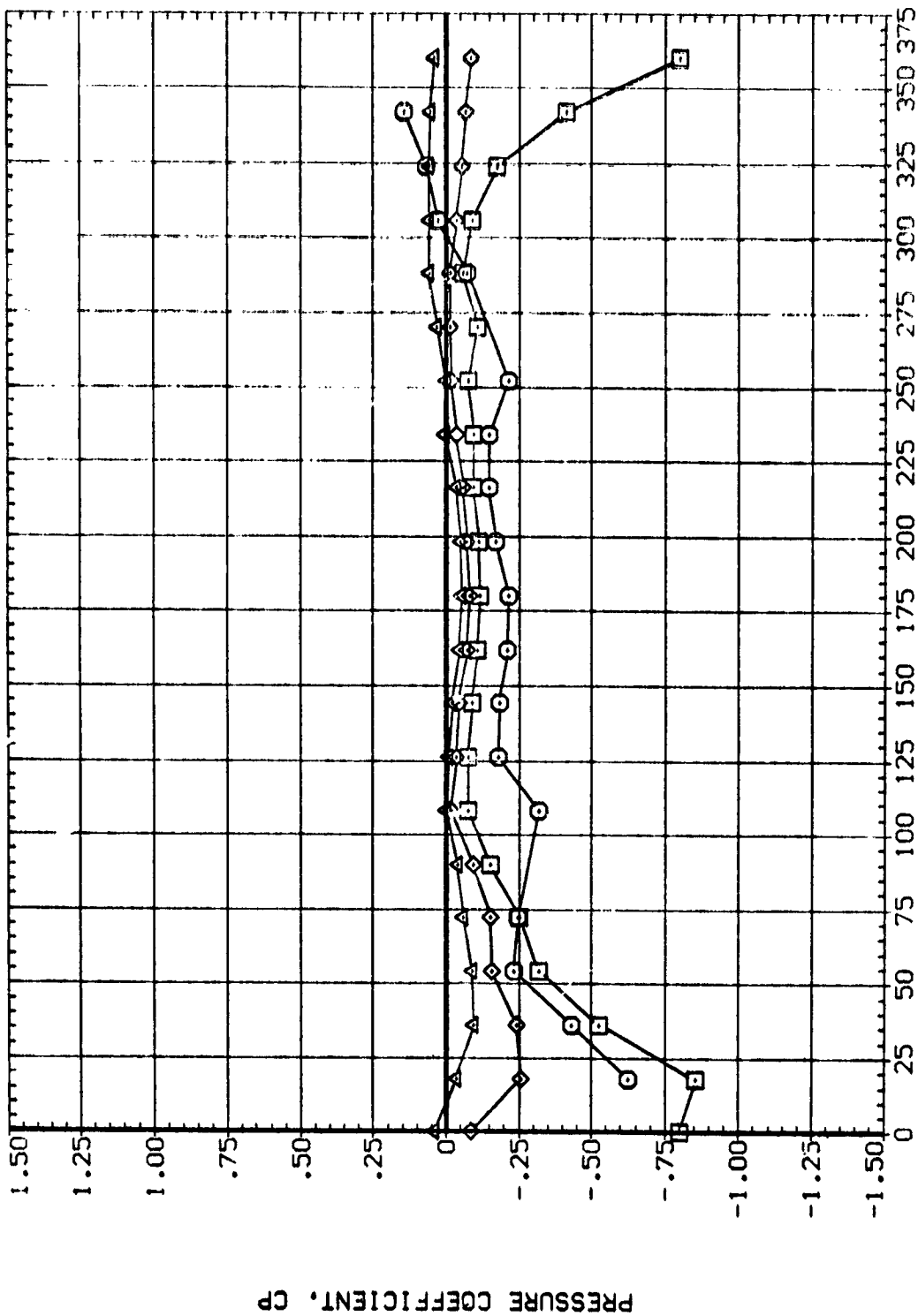
MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK 1A821060

SYMBOL  
 ◊  
 ◻  
 ◊  
 ◻

X/LT    BETA    MACH  
 .438    8.000    .900  
 .506  
 .573  
 .641

REFERENCE DATA  
 SREF 6.198  
 LREF 5.313  
 BREF 5.313  
 XREF 2.549  
 YREF .000  
 ZREF .000

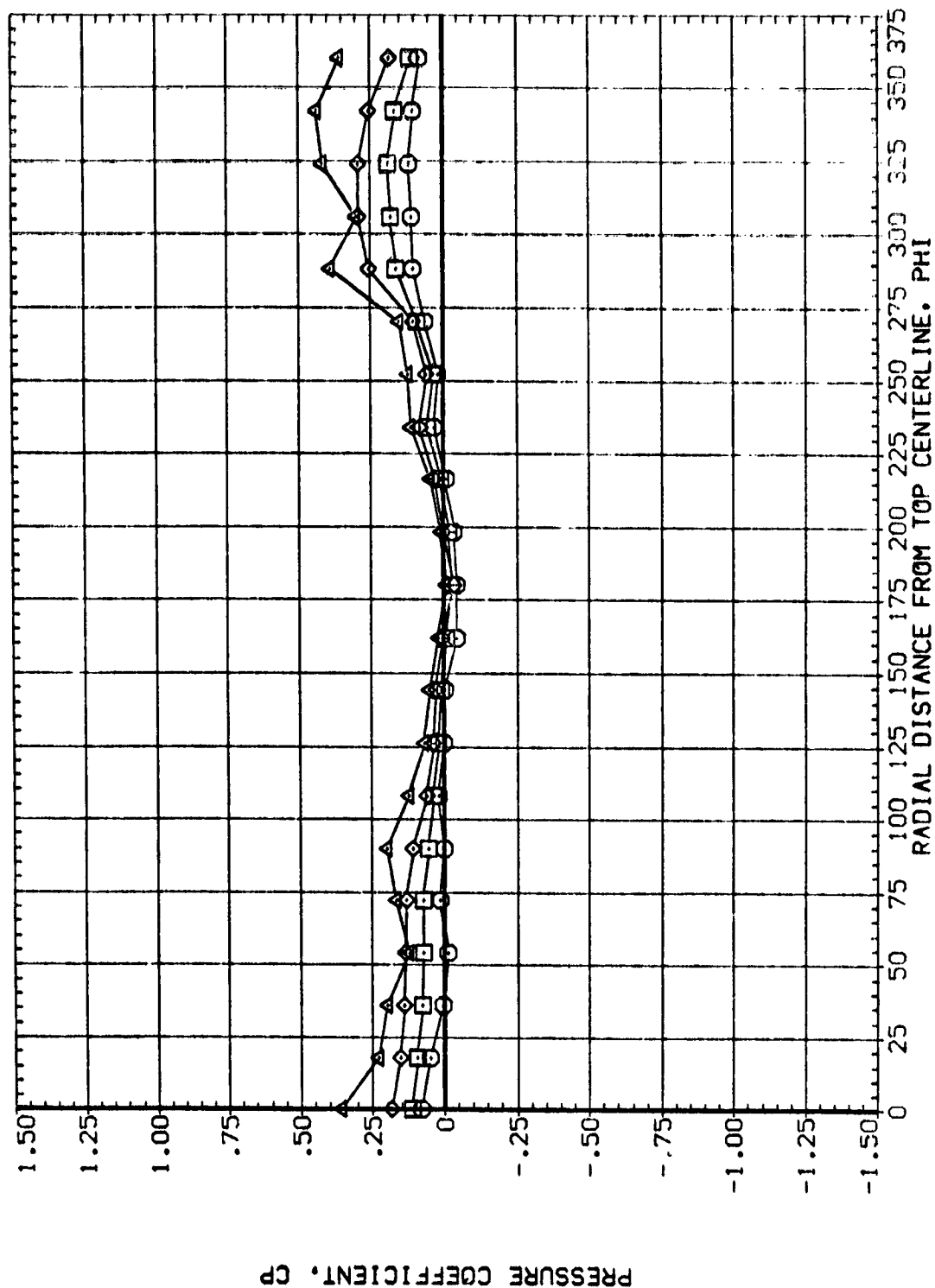
PARAMETRIC VALUES  
 ALPHA .000  
 DELTAZ .140  
 X-SRB .000  
 Y-SRB .500  
 Z-SRB .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 03 U5 EXTERNAL TANK (A92106)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO. IN.	CONFIS	90.000
○	.708	8.000	.900	LREF	IN.	.000	.000
□	.776			BREF	IN.	.140	.000
◇	.844			XREF	IN.	.000	.500
△	.912			ZREF	IN.	.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5

MCFC 56701A32E) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A8C705)

**SYMBOL** **0**

171  
384

00075  
V138

006.  
HJv

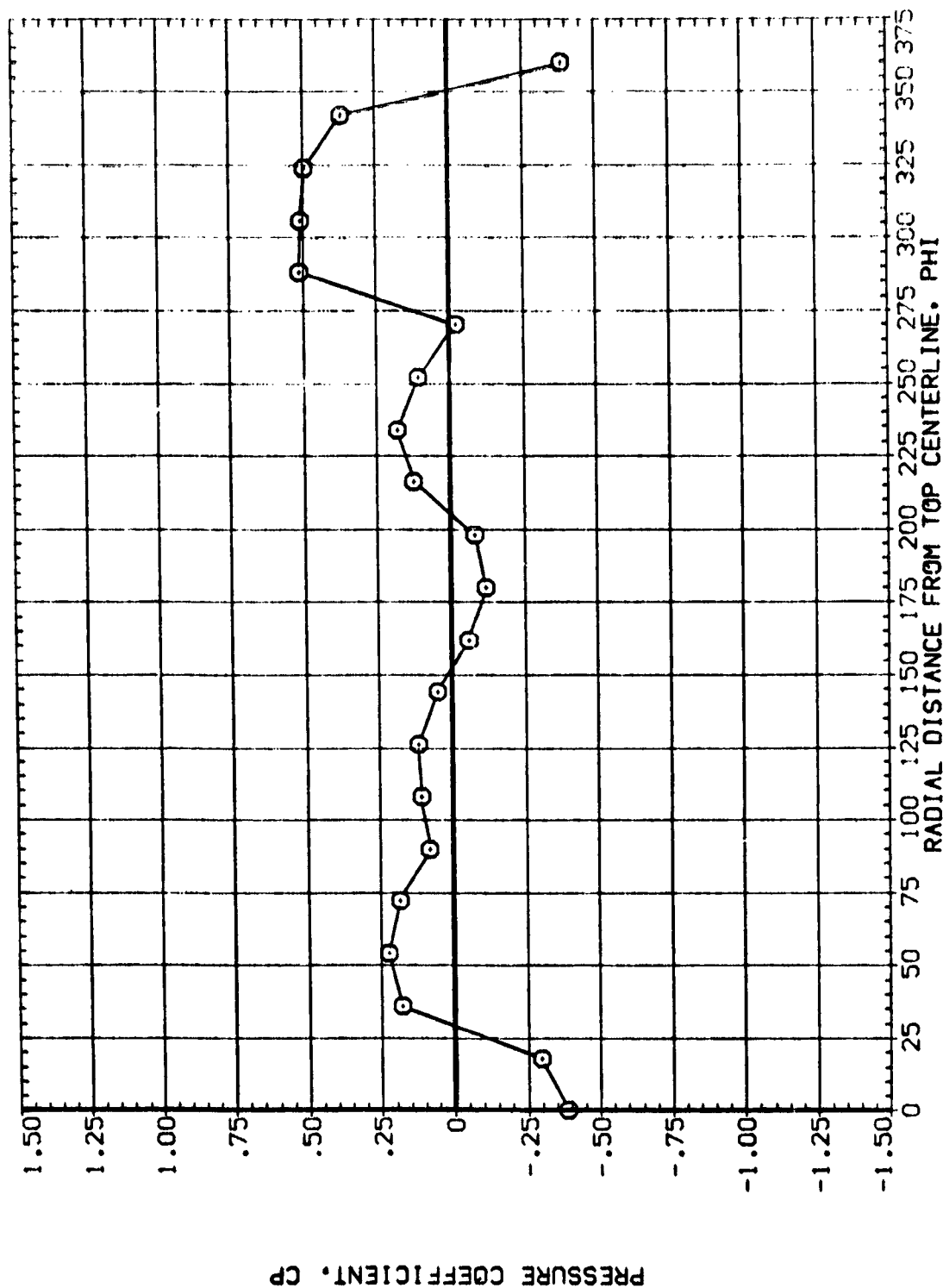
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SREF	6.198
LREF	5.713
BREF	5.510
XMRP	2.440
YMRP	1.330
ZMRP	0.300

IN.  
55722222

ALP-4A  
DELTA Z  
X-SRB

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818

11-11-68

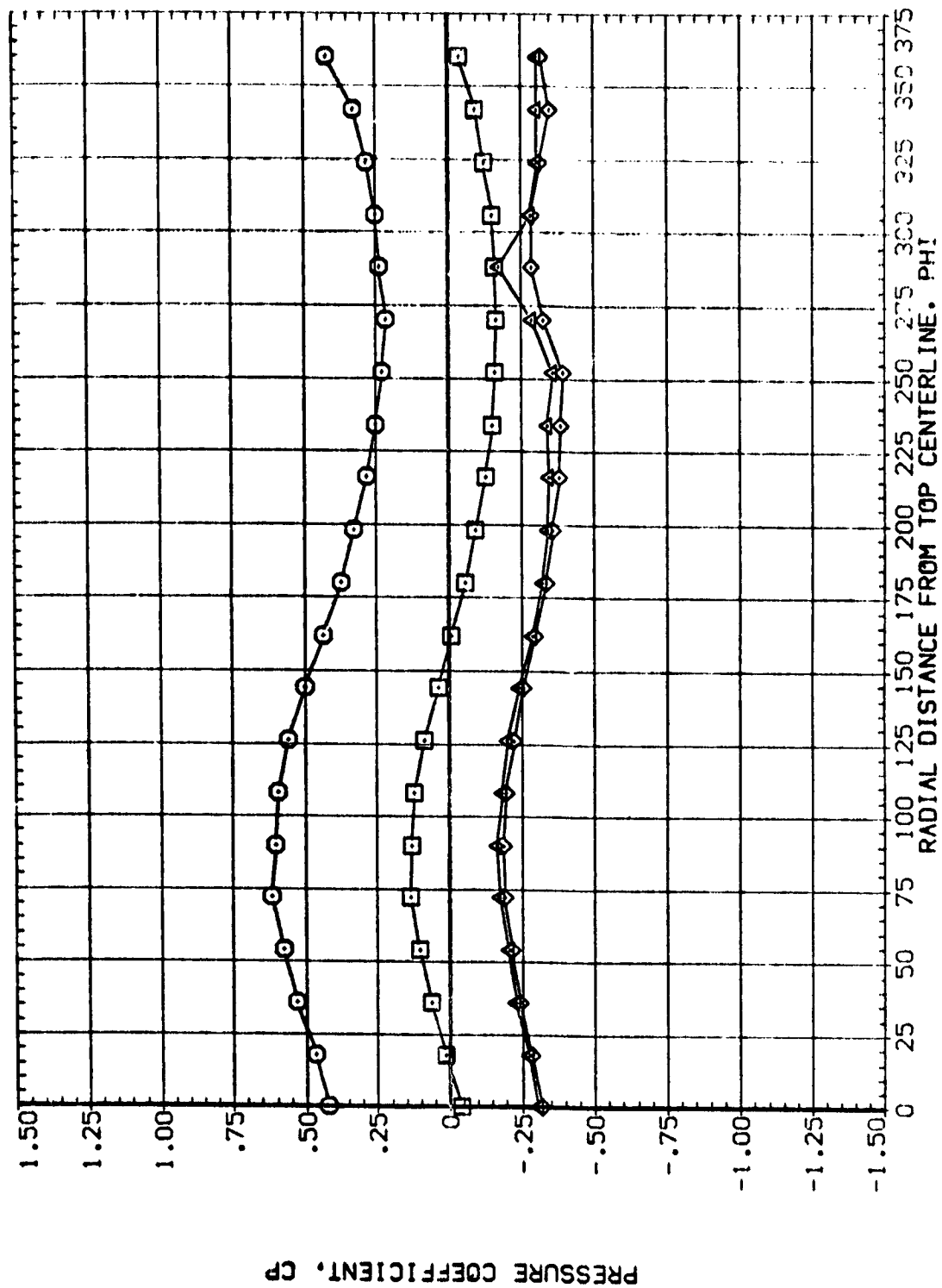


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	M/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.076	-8.000	1.250	SREF 6.198	.000 CONVIG
◇	.155			LREF 5.313	.140 RUDDER
□	.220			BREF 2.549	.000 S3/2 NC
△	.235			YMRP .000	
				ZMRP .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MSFC 56701A32F) T9 S3/2 03 U5 EXTERNAL TANK 192106

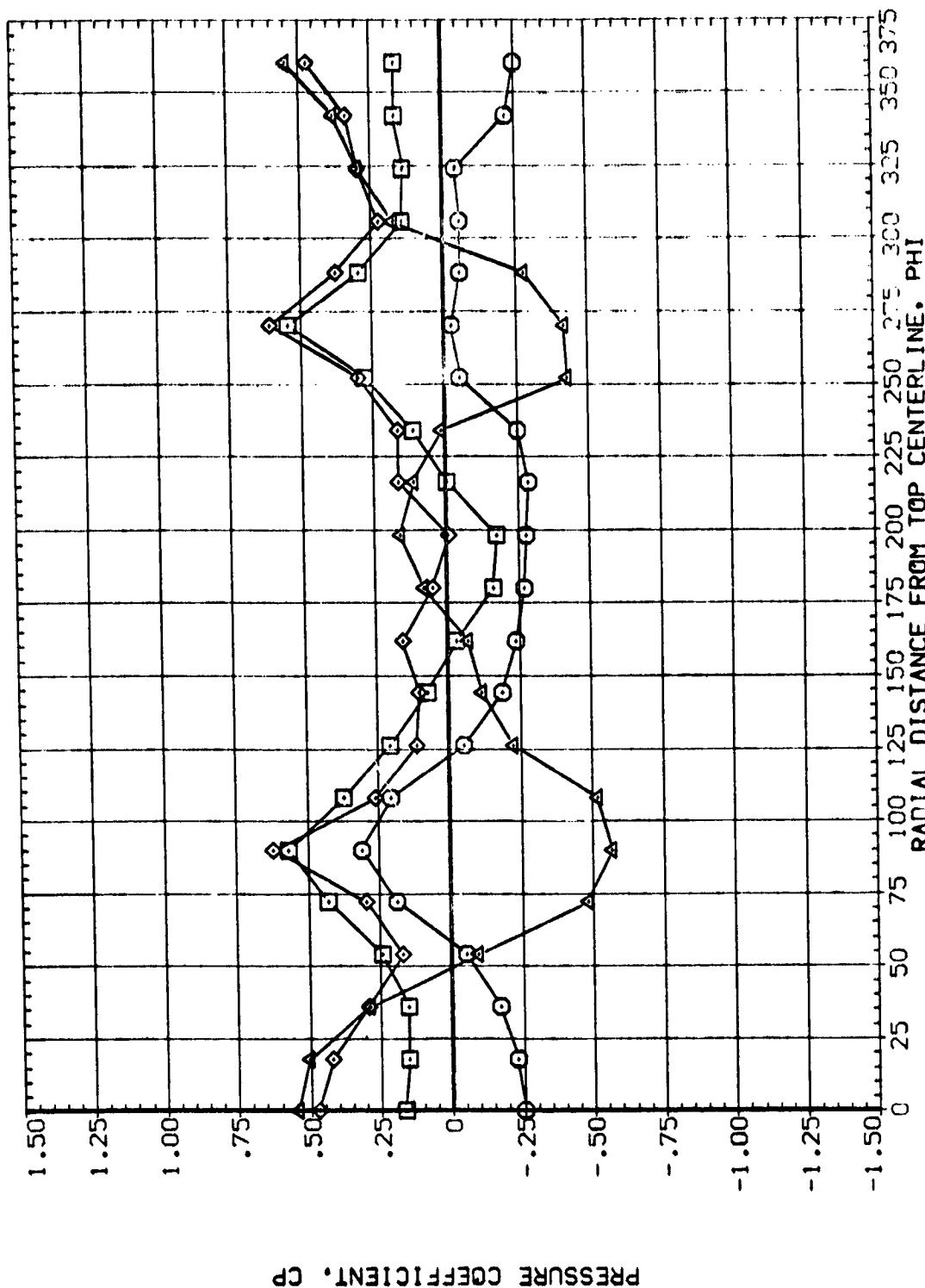
SYMBOL  
 ○  
 □  
 ◇  
 △

X/UT BETA MACH  
 .271 -8.000 1.250  
 .314  
 .350  
 .382

REFERENCE DATA  
 SREF 6.190  
 LREF 5.313  
 BREF 5.313  
 YMRP 2.548  
 ZMRP .000

ALPHA  
 0.000  
 0.140  
 0.000

PARAMETRIC VALUES  
 CD\*IC .000  
 RUDDER .000  
 CRBINC .500

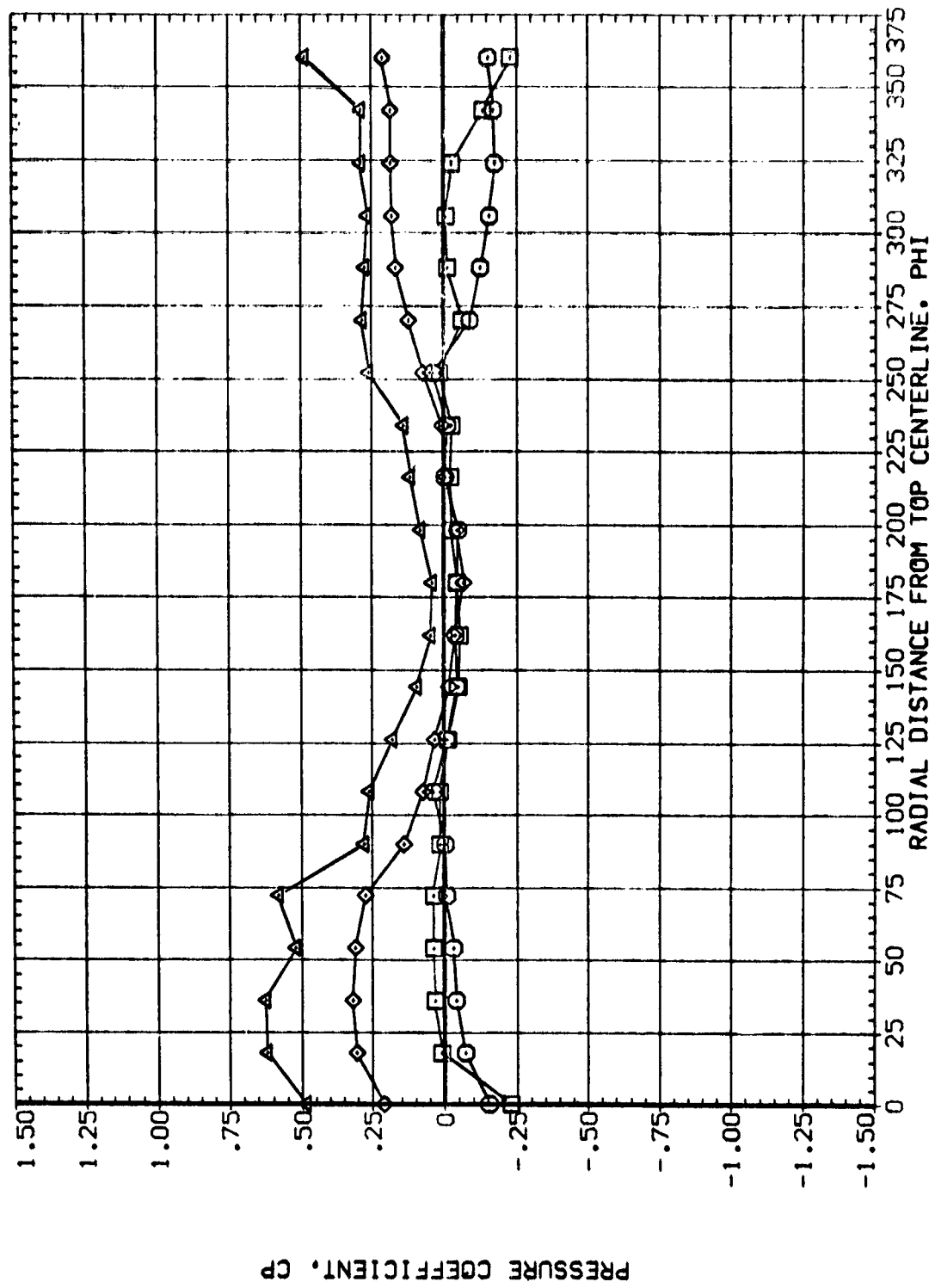


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5



MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	X/LT		BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
	.708	.776			SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	DELTA Z	CONFIS
○			-8.000	1.250	6.198	5.313	5.313	2.549	IN.			.000
□									IN.			.140
◇									IN.			.000
△									IN.			.500



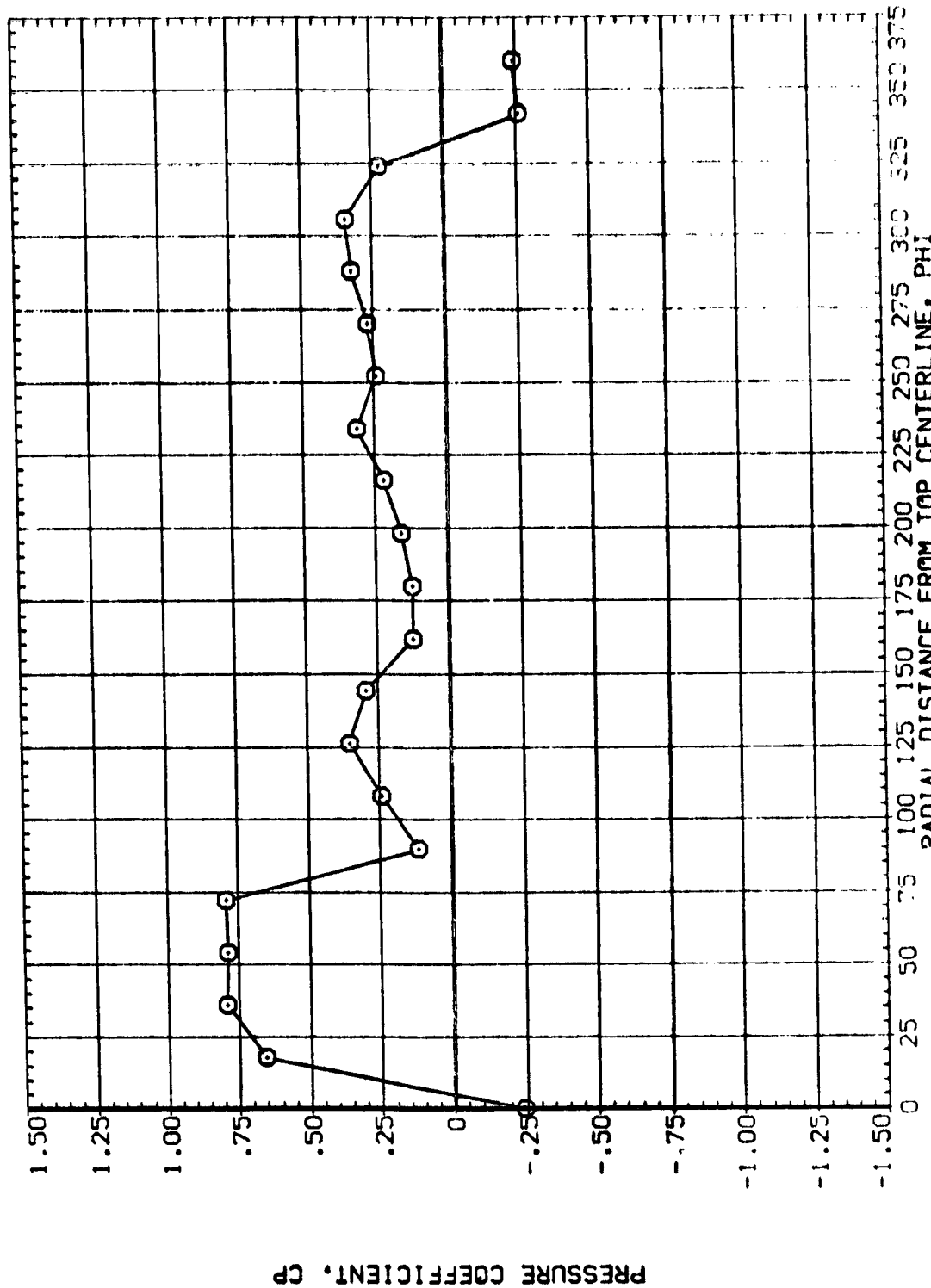
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	ALT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SO. IN.	ALPHA	DELTA Z	CONFIG
0	.984	8.000	1.250	6.198	5.313	5.313	2.649	IN.	.000	.140	R000R
							.000	IN.	.000	.000	OR01NC
							.000	IN.			.500
							.000	IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82T05)

SYMBOL  
 ○  
 □  
 ◇  
 △

X/ALT .076  
 .155  
 .220  
 .235

BETA .000

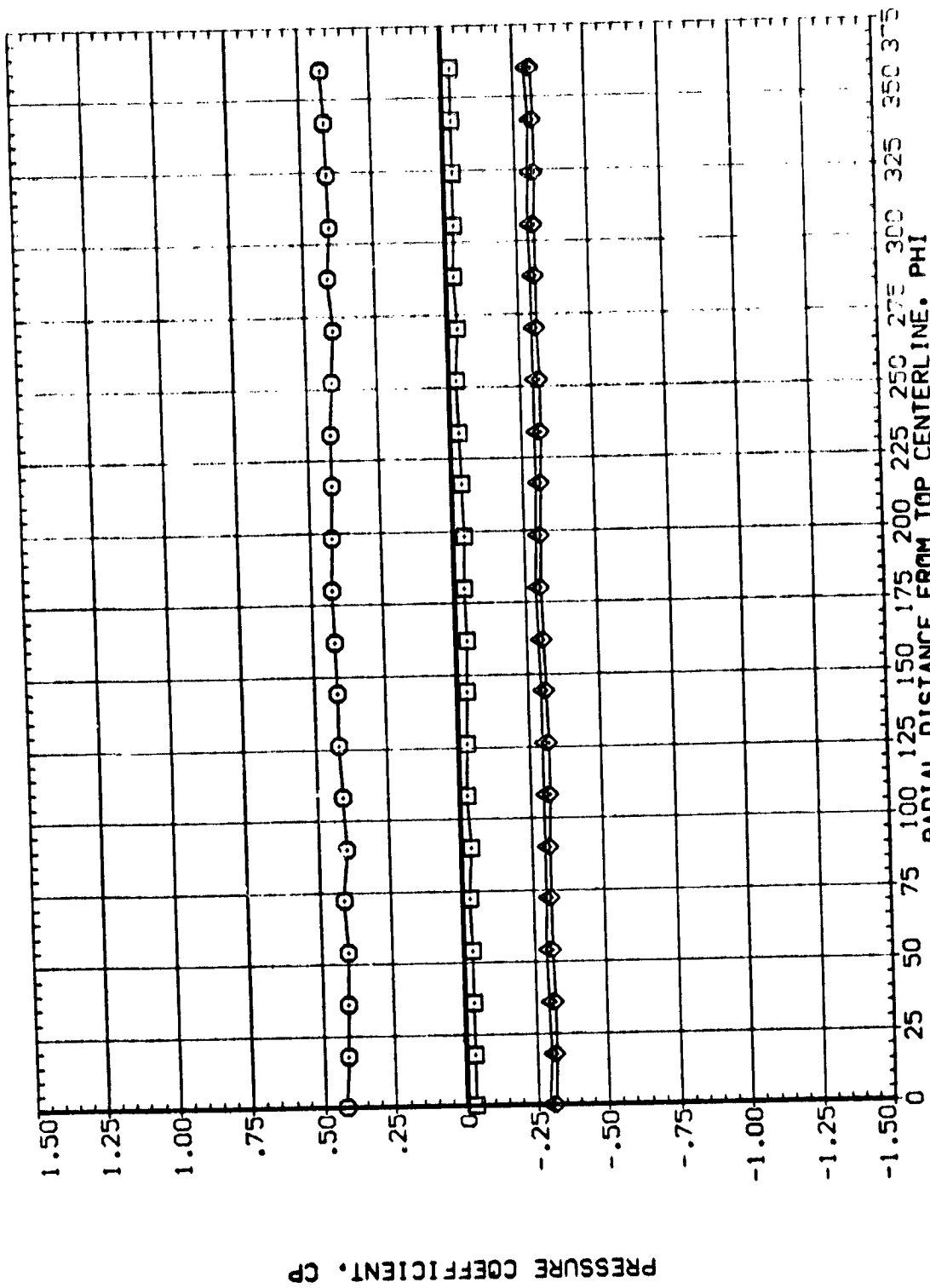
MACH 1.250

REFERENCE DATA  
 SREF 6.194  
 LREF 5.313  
 BREF 5.313  
 XMRP 2.548  
 YMRP .000  
 ZMRP .000

SQ. IN.  
 IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTA2  
 N-SRB

RADIOMETRIC VALUES  
 CONF15 .000  
 RUJER .400  
 ORSLINE .500

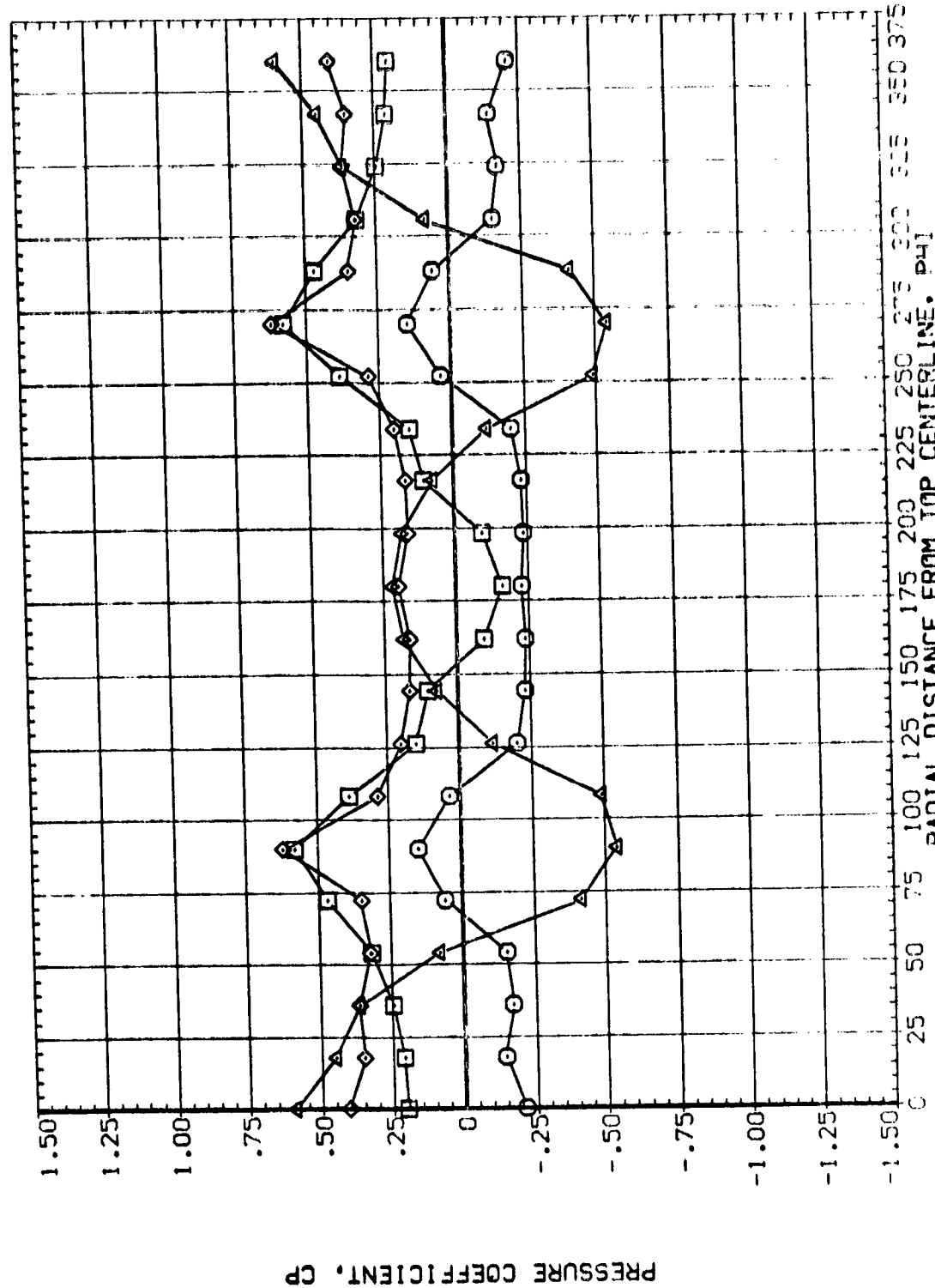


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5



MSFC 567(IA32F) T9 S3/2 S3/2 03 US EXTERNAL TANK (A821C6)

SYMBOL	X/L	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	UREF	BREF	XMRP	ALPHA	DELTA Z	DELTA TIS	DELTA TIS
○	.271	.000	1.250	6.198	5.313	2.549	.000	50. IN.	IN.	.000	.000
□	.314	.000	1.250	5.313	2.549	.000	.000	DELTA Z	.140	.000	.000
◇	.350	.000	1.250	2.549	.000	.000	.000	X-SRB	.000	.000	.000
△	.382	.000	1.250	.000	.000	.000	.000			.000	.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 US

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (AS2T06)

SYMBOL

X/T

BETA

MACH

REFERENCE DATA

SG. IN.

ALPHA

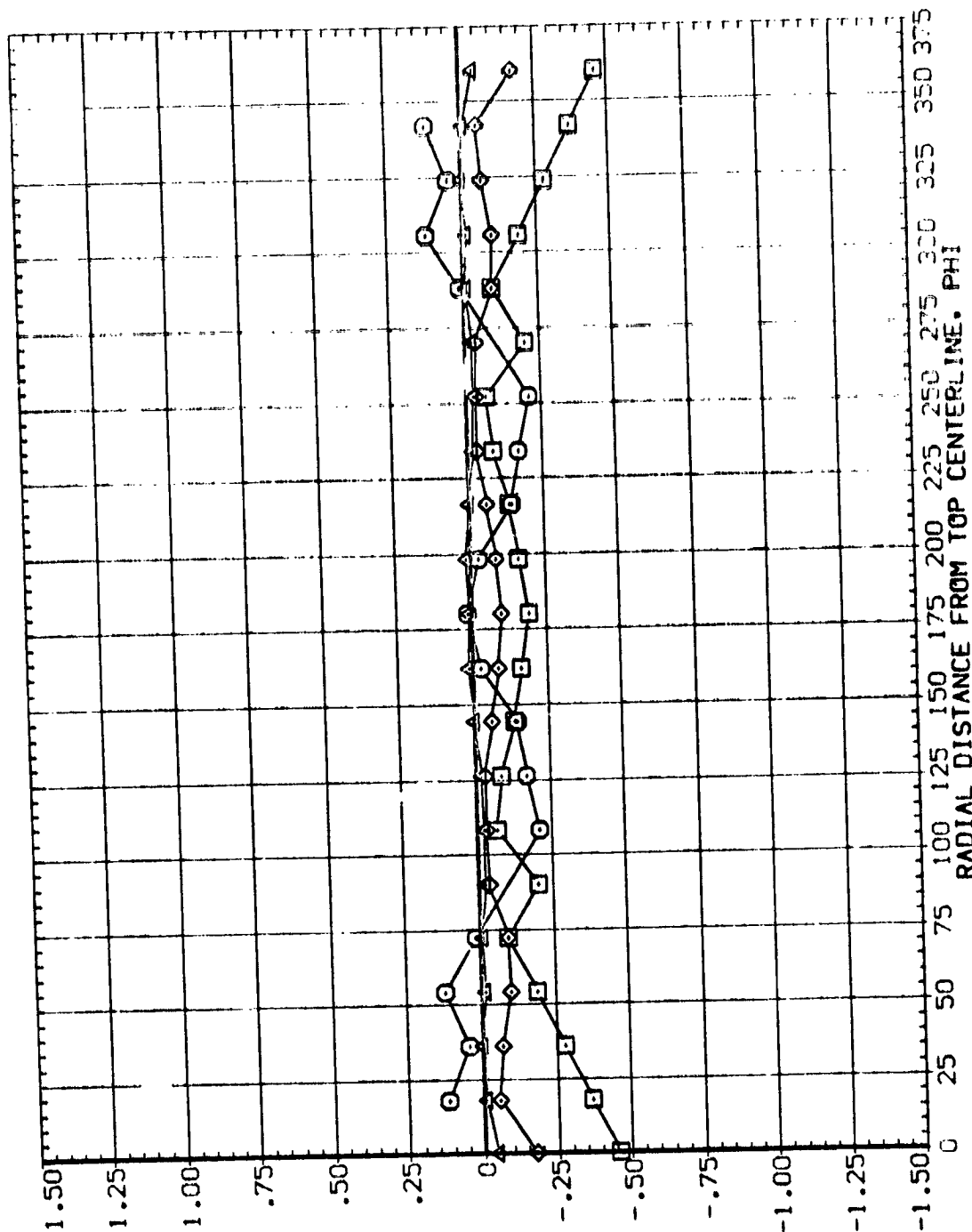
PARAMETER VALUES

90.000

.000

.500

PRESSURE COEFFICIENT, CP



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A92105)

SYMBOL

X/LT

BETA

MACH

REF

REF

REF

REF

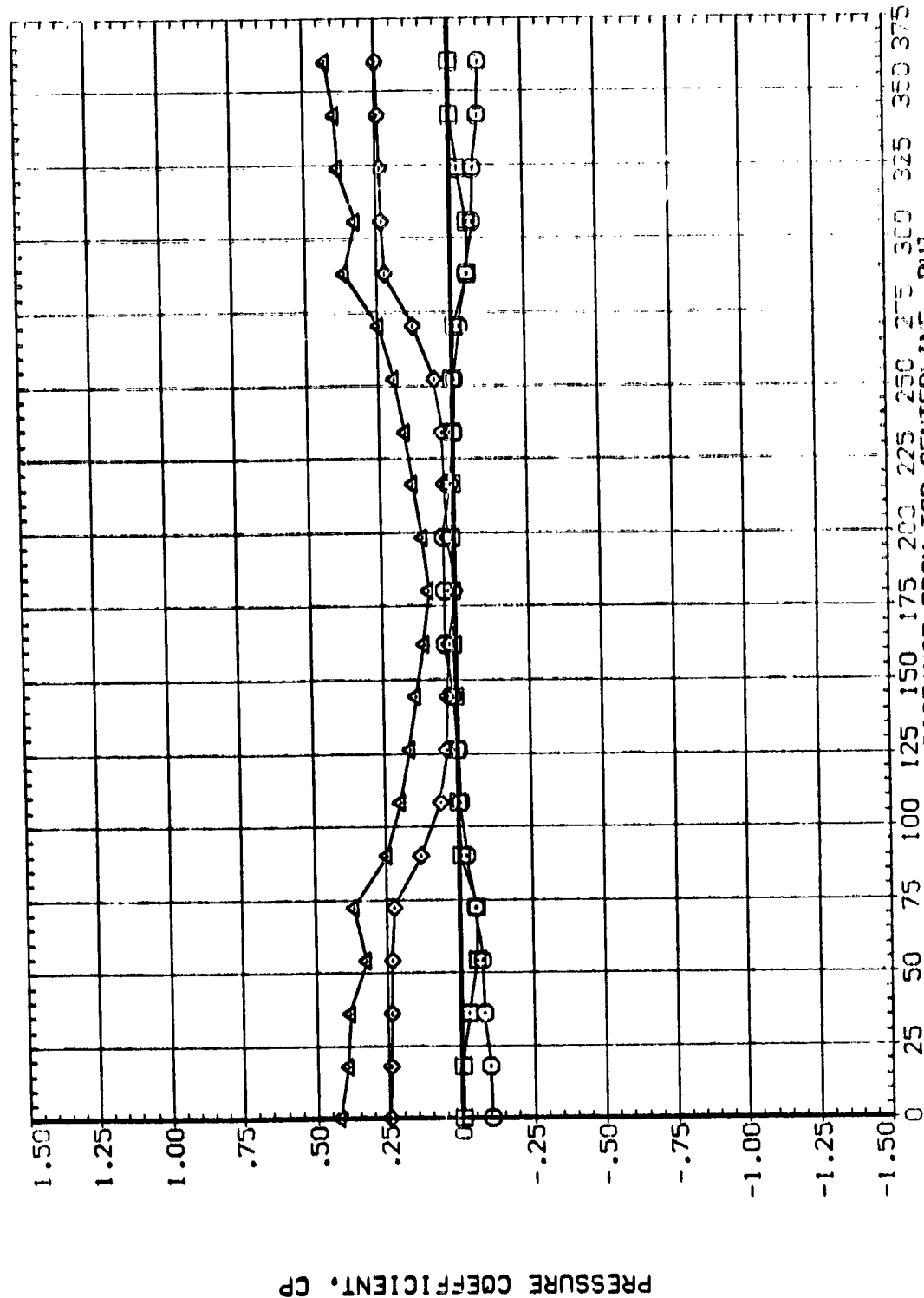
REF

REF

REF

REF

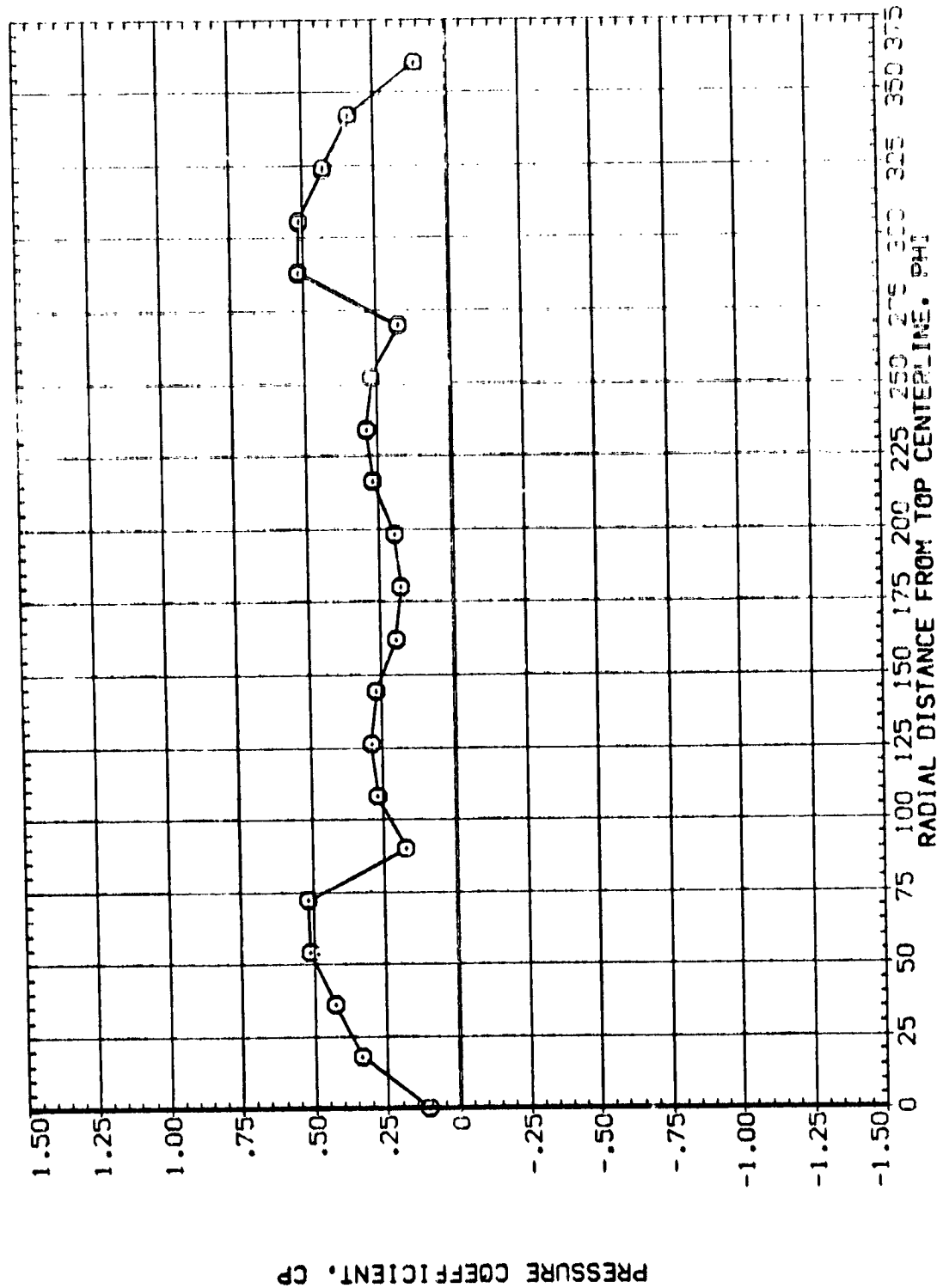
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RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

X/LT	BETA	MACH
.984	.000	1.250

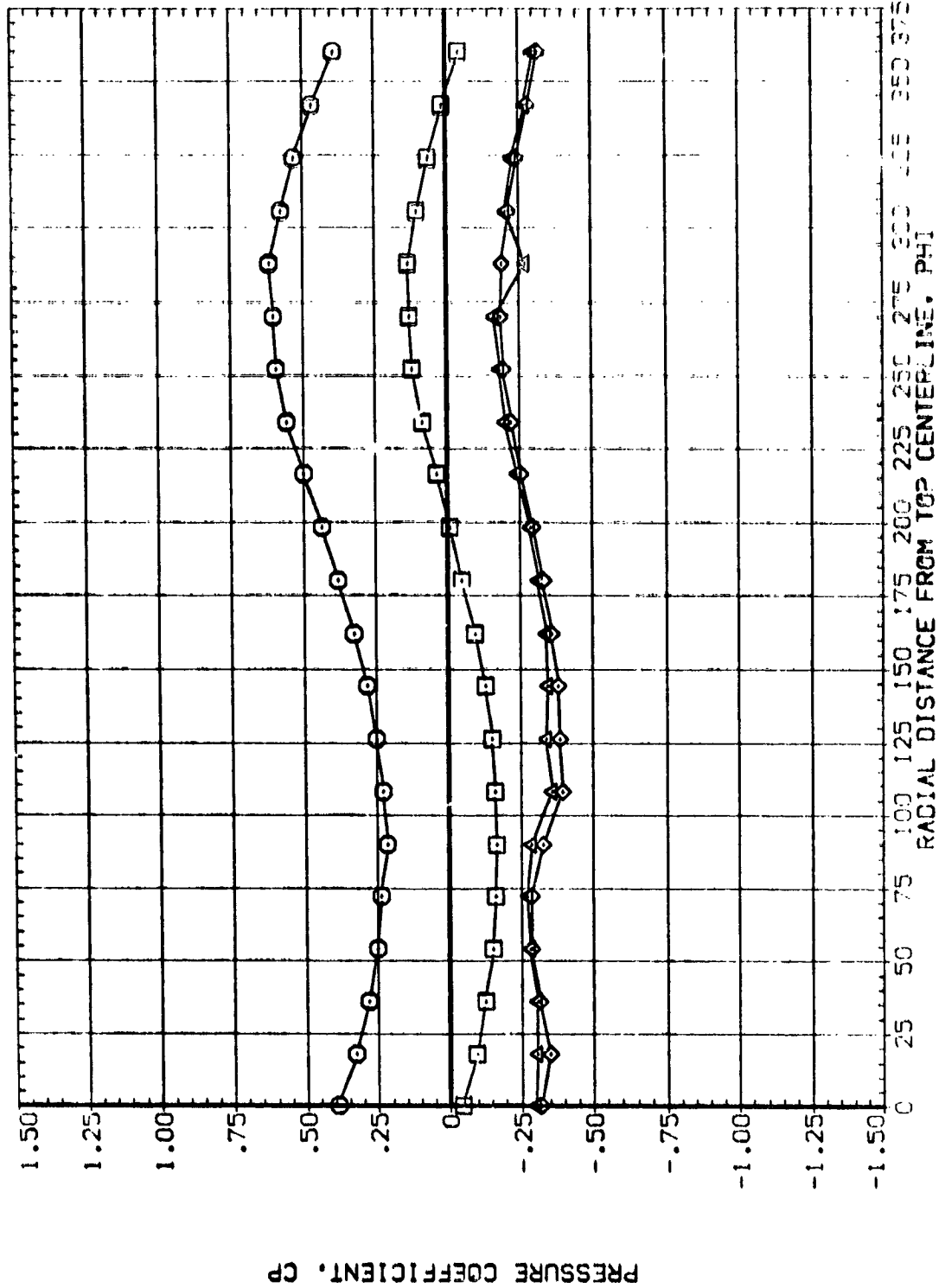
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K2F	5.242	ROTOR	1.00
K3F	4.772	STATOR	1.00
K4F	4.302		
K5F	3.832		
K6F	3.362		
K7F	2.892		
K8F	2.422		
K9F	1.952		
K10F	1.482		
K11F	1.012		
K12F	0.542		
K13F	0.072		
K14F	0.002		
K15F	0.000		
K16F	0.000		
K17F	0.000		
K18F	0.000		
K19F	0.000		
K20F	0.000		
K21F	0.000		
K22F	0.000		
K23F	0.000		
K24F	0.000		
K25F	0.000		
K26F	0.000		
K27F	0.000		
K28F	0.000		
K29F	0.000		
K30F	0.000		
K31F	0.000		
K32F	0.000		
K33F	0.000		
K34F	0.000		
K35F	0.000		
K36F	0.000		
K37F	0.000		
K38F	0.000		
K39F	0.000		
K40F	0.000		
K41F	0.000		
K42F	0.000		
K43F	0.000		
K44F	0.000		
K45F	0.000		
K46F	0.000		
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K49F	0.000		
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K63F	0.000		
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K65F	0.000		
K66F	0.000		
K67F	0.000		
K68F	0.000		
K69F	0.000		
K70F	0.000		
K71F	0.000		
K72F	0.000		
K73F	0.000		
K74F	0.000		
K75F	0.000		
K76F	0.000		
K77F	0.000		
K78F	0.000		
K79F	0.000		
K80F	0.000		
K81F	0.000		
K82F	0.000		
K83F	0.000		
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K95F	0.000		
K96F	0.000		
K97F	0.000		
K98F	0.000		
K99F	0.000		
K100F	0.000		



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 S3/2

MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82706)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETER VALUES	
				SREF	SO. IN.	ALPHA	CONF IS
○	.076	8.000	1.250	6.138	IN.	DELTA Z	.000
□	.155			5.313	IN.	DELTA Z	.000
△	.220			2.548	IN.	DELTA Z	.000
▽	.235			.000	IN.	DELTA Z	.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82706)

SYMBOL

X/LT .271  
.314  
.350  
.382

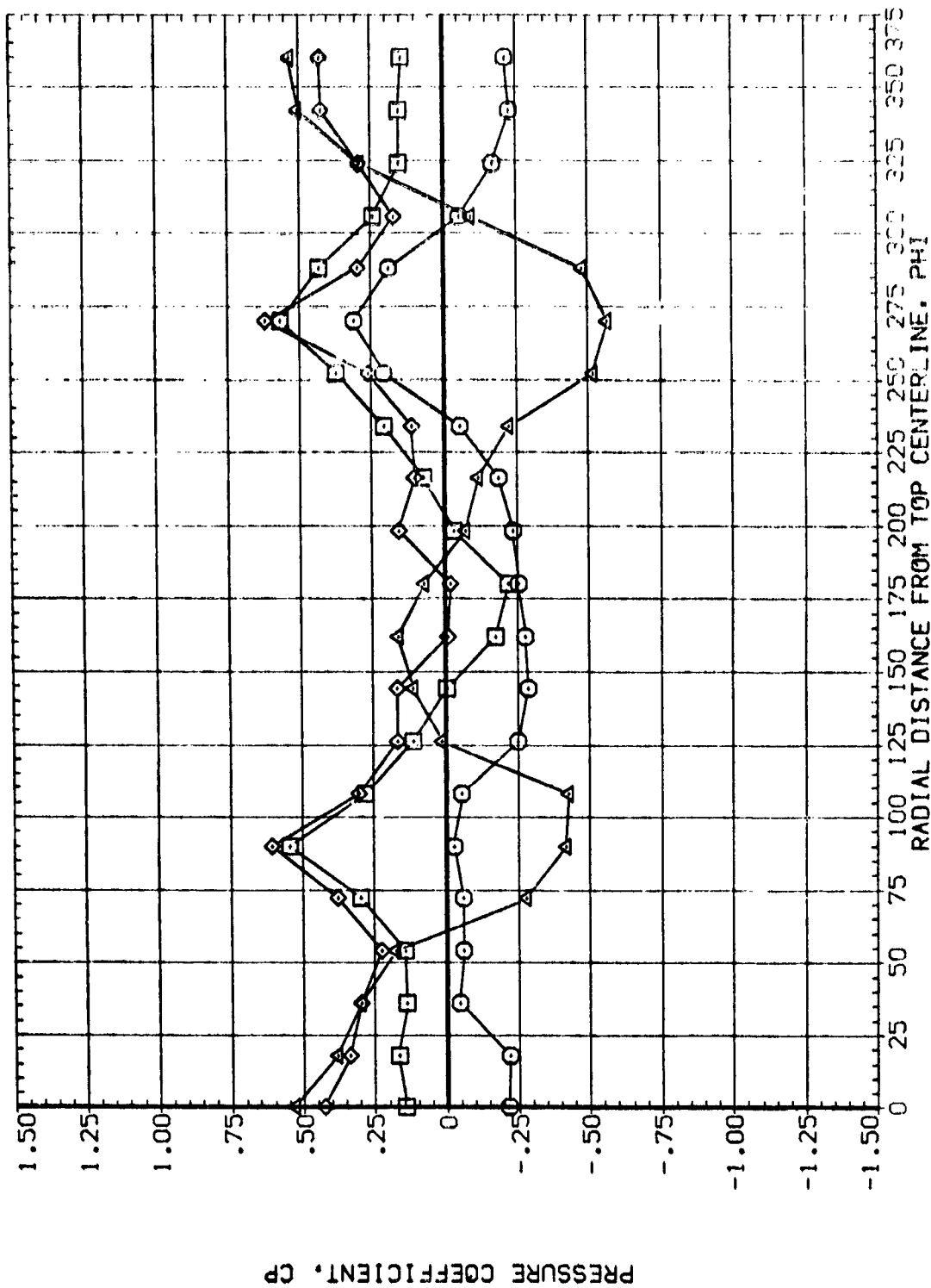
BETA 0.000

MACH 1.250

REFERENCE DATA  
SREF 6.199  
LREF 5.312  
BREF 5.312  
XMRP 2.548  
YMRP 1.000  
ZMRP 1.000

PARAMETRIC VALUES

ALPHA .000  
DELTAZ .000  
V-SUB .000  
Q-REF .000  
Q-REF .000  
Q-REF .000



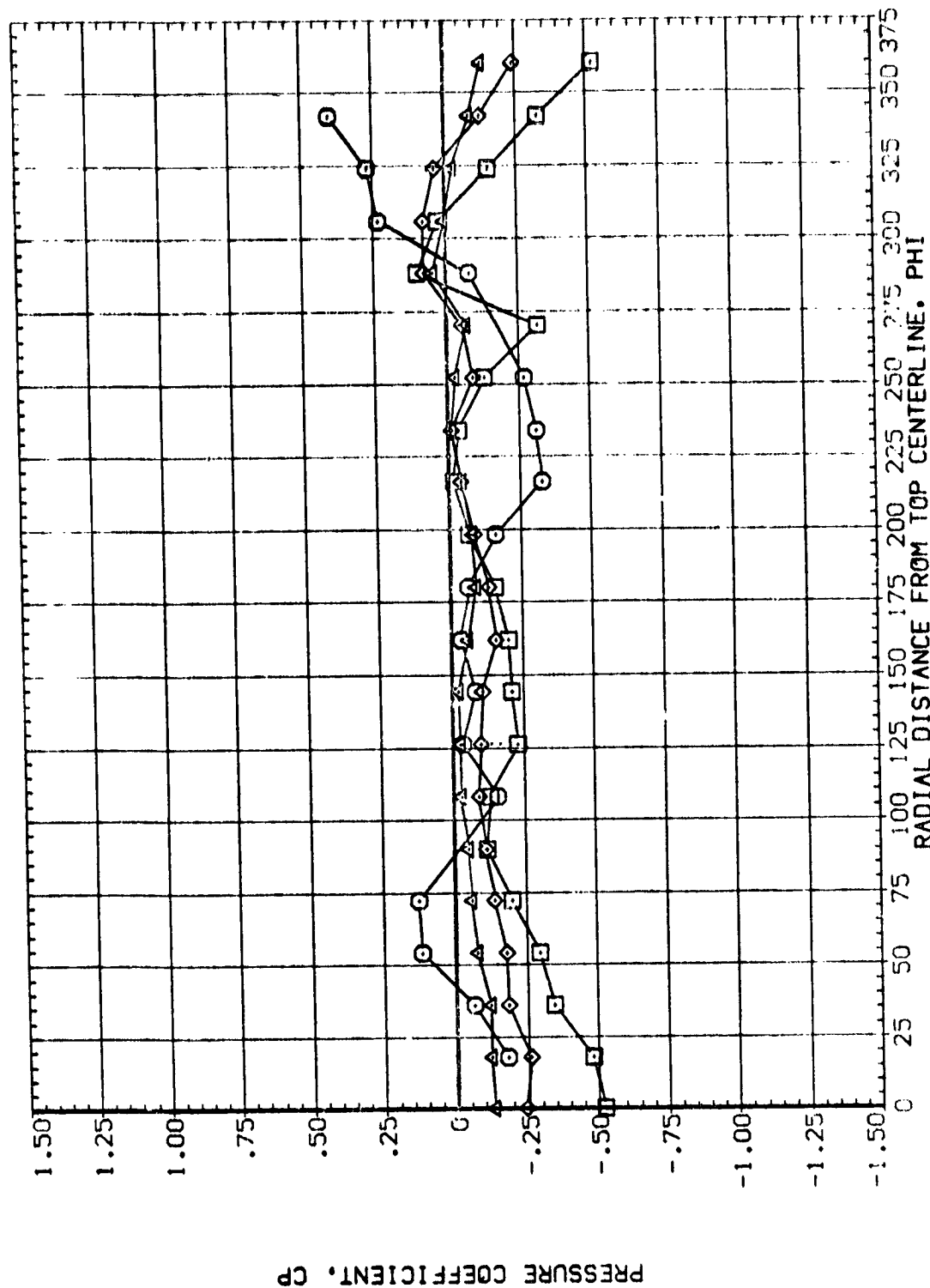
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5





# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	X/LT		BETA	MACH	REFERENCE DATA		SO. IN.	ALPHA		PARAMETRIC VALUES	
	.438	.506			SPEC	LPREF		CELTAZ	CELTAS	COE E	COE E
□	.506	.573	8.000	1.250	5.313	5.313	1.000	140	140	1.000	1.000
◇	.573	.641			2.549	2.549	1.000	140	140	1.000	1.000
△	.641				1.000	1.000	1.000	140	140	1.000	1.000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



≡ ≡

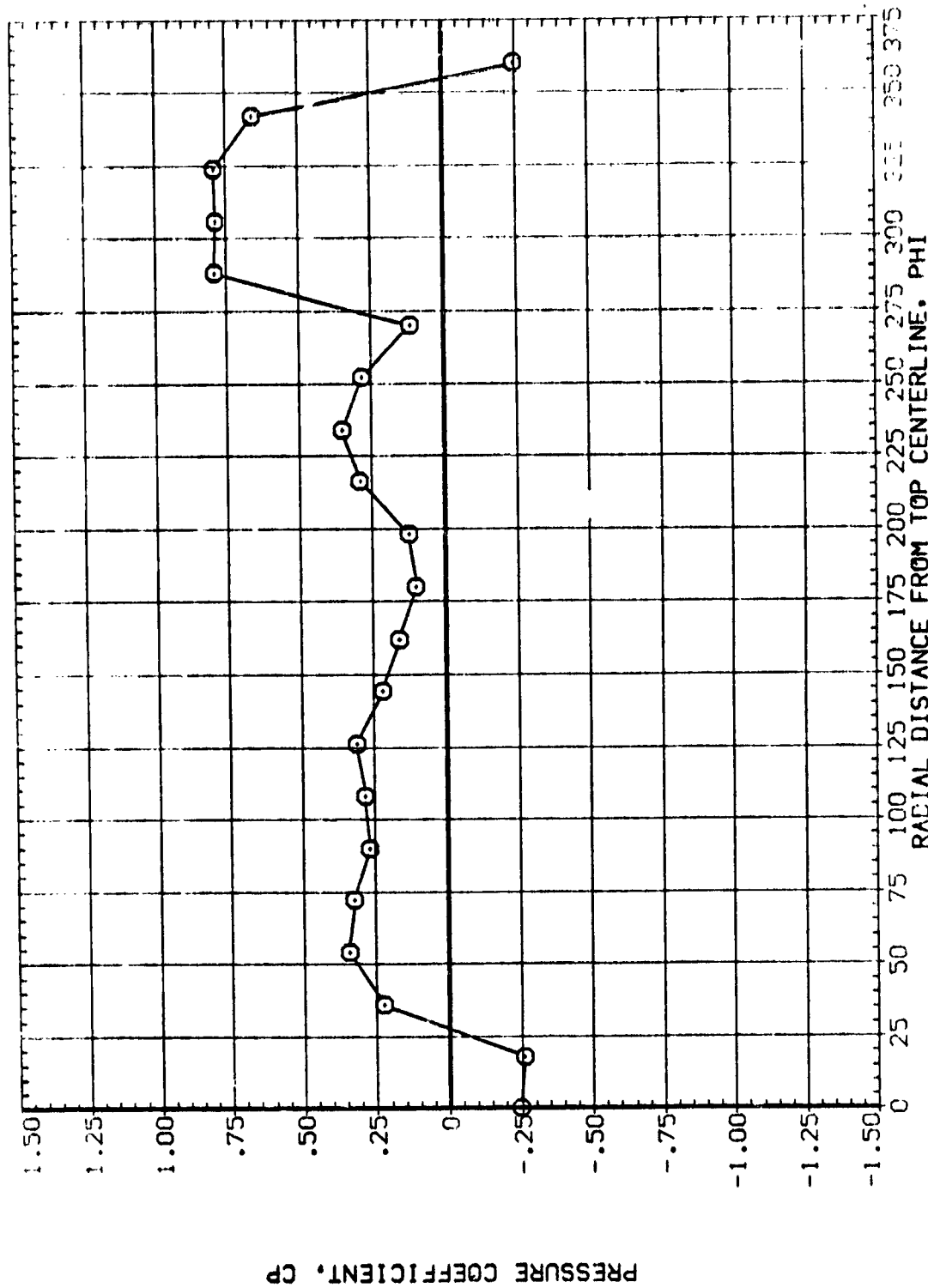
# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL  
C

X LT .984 BETA 8.000 MACH 1.250

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPRP 2.549  
YPRP 1.000  
ZPRP 1.000

PARAMETRIC VALUES  
ALPHA .000 CONF15 90.000  
DELTAZ .140 RUDDER .000  
A-SP8 .000 DRBINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5



MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A8210E)

SYMBOL  
 ○ □ ◇ △

X/LT .271  
 .314  
 .350  
 .362

BETA -8.000

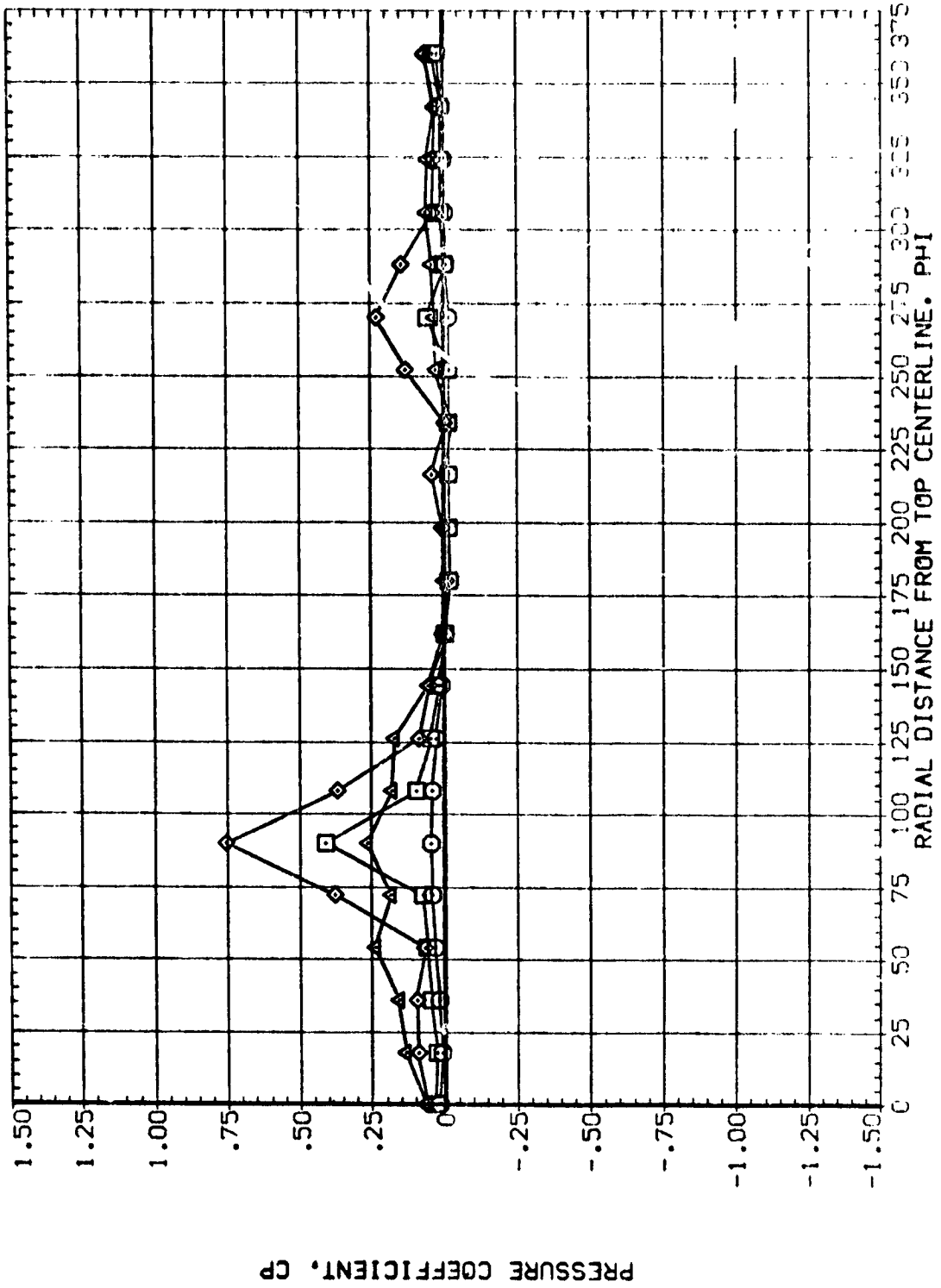
MACH 3.500

REFERENCE DATA  
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 LREF 5.313  
 BREF 5.313  
 XMRP 2.549  
 YMRP .000  
 ZMRP .000

SO. IN.  
 IN.  
 IN.  
 IN.

ALPHA  
 DELTAZ  
 X-SRB

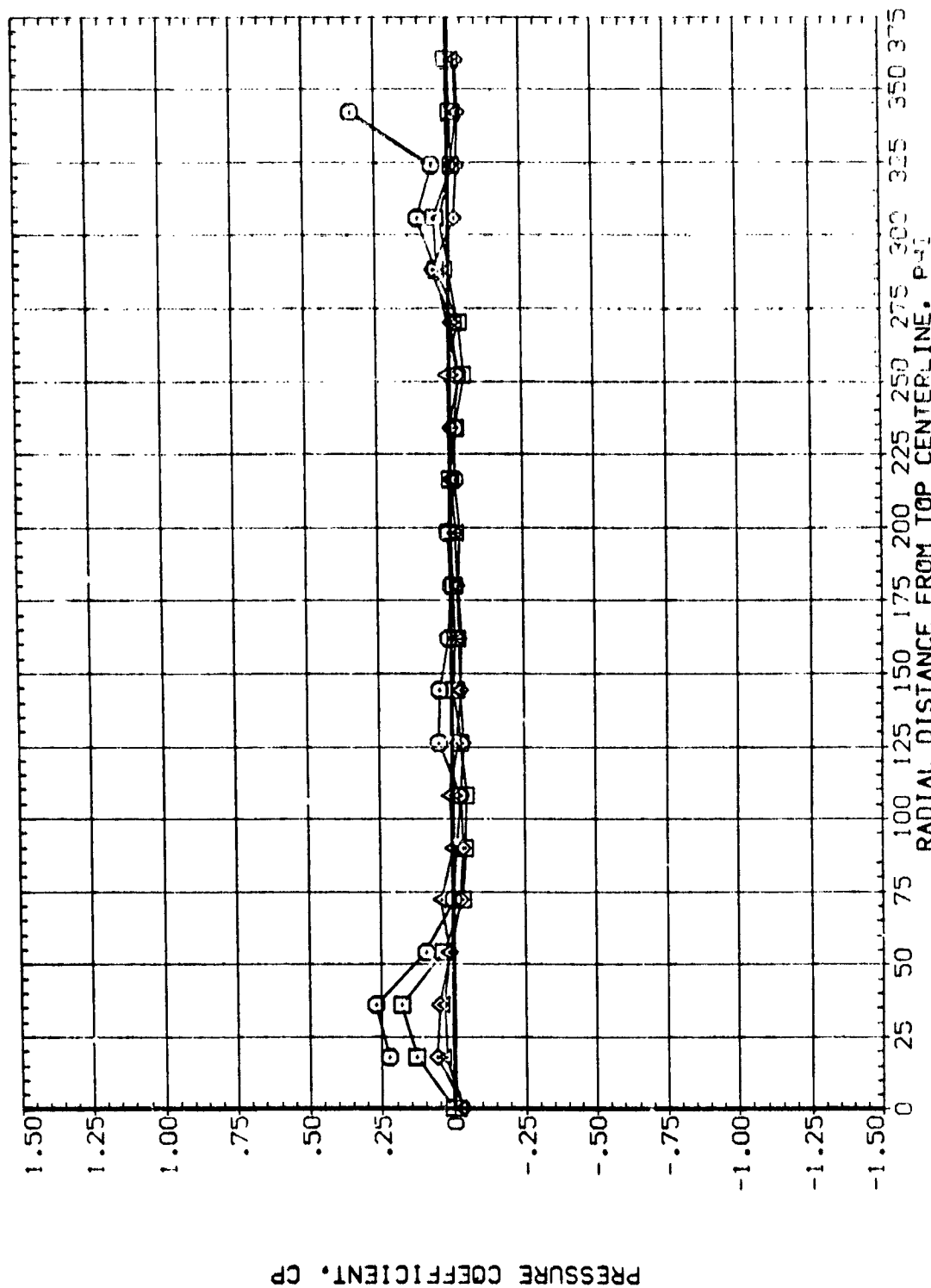
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 .140 RUDDER .000  
 .000 ORBINC .500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 G3 U5 EXTERNAL TANK (A82T06)

SYMBOL	REFERENCE DATA			PARAMETRIC VALUES		
	Y/LI	BETA	MACH	ALPHA	CONFIS	90.000
○	.438	-8.000	3.500	DELTA Z	.000	.000
□	.506			X-SRB	.000	.000
◇	.573					.500
△	.641					



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 G3 U5



MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL  
 ○  
 ◇  
 △

X/LT .708  
 .776  
 .844  
 .912

BETA -8.000

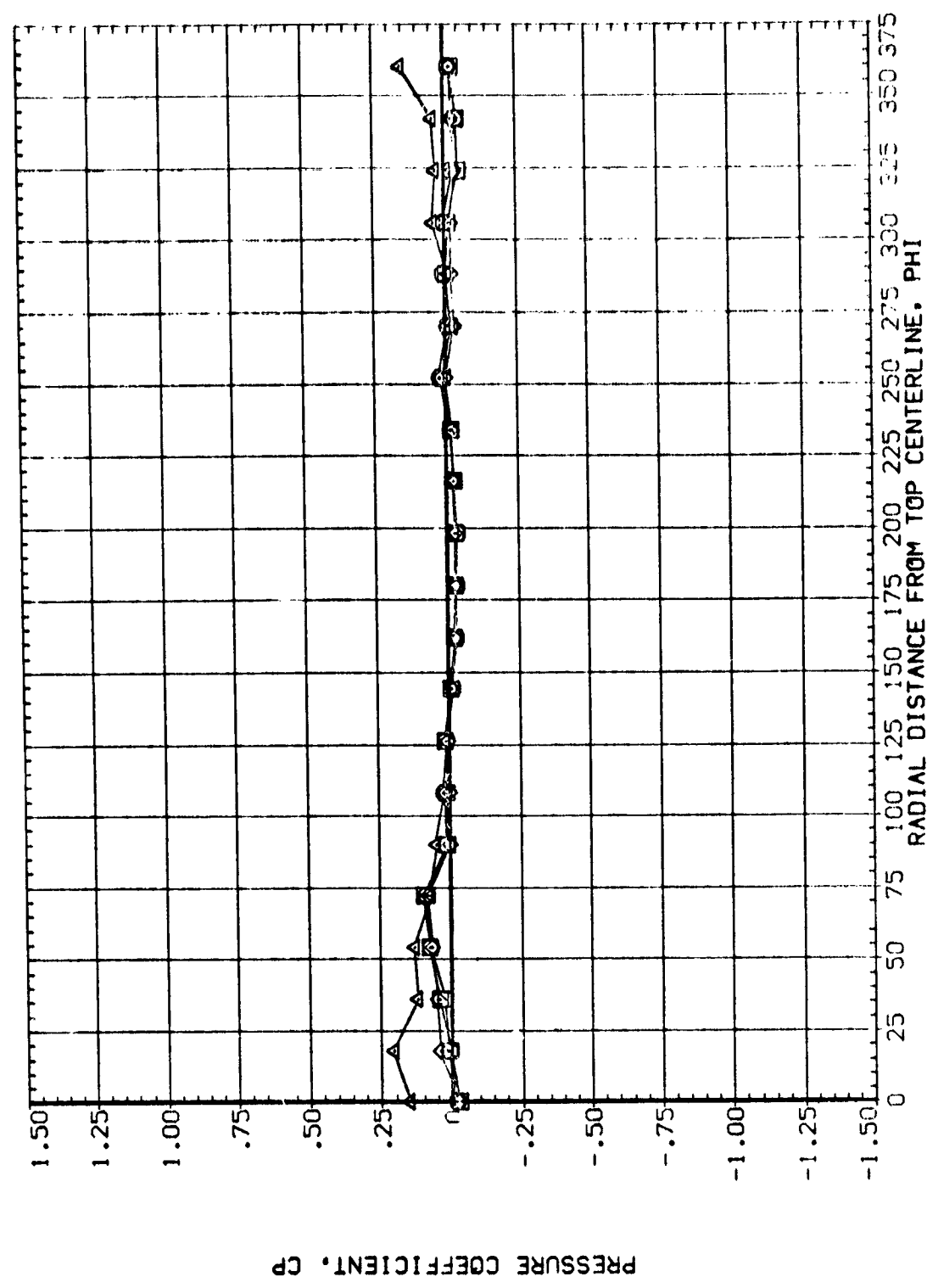
MACH 3.500

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 BREF 5.313  
 XMRP 2.549  
 YMRP 1.000  
 ZMRP 1.000

PARAMETRIC VALUES  
 COFIS .000  
 RUDDER .000  
 ORING .000

ALPHA  
 DELTAZ  
 V-SR0

90.00  
 .000  
 .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

MOFC 567(1A32F) TS 93 1 93/2 93 US EXTERNAL TANK (A92T06)

PARAMETER VALUES

ALPHA

REF. DATA

SREF  
LREF  
BREF  
XREF  
YREF  
ZREF

BETA

MACH

3.500

TIME

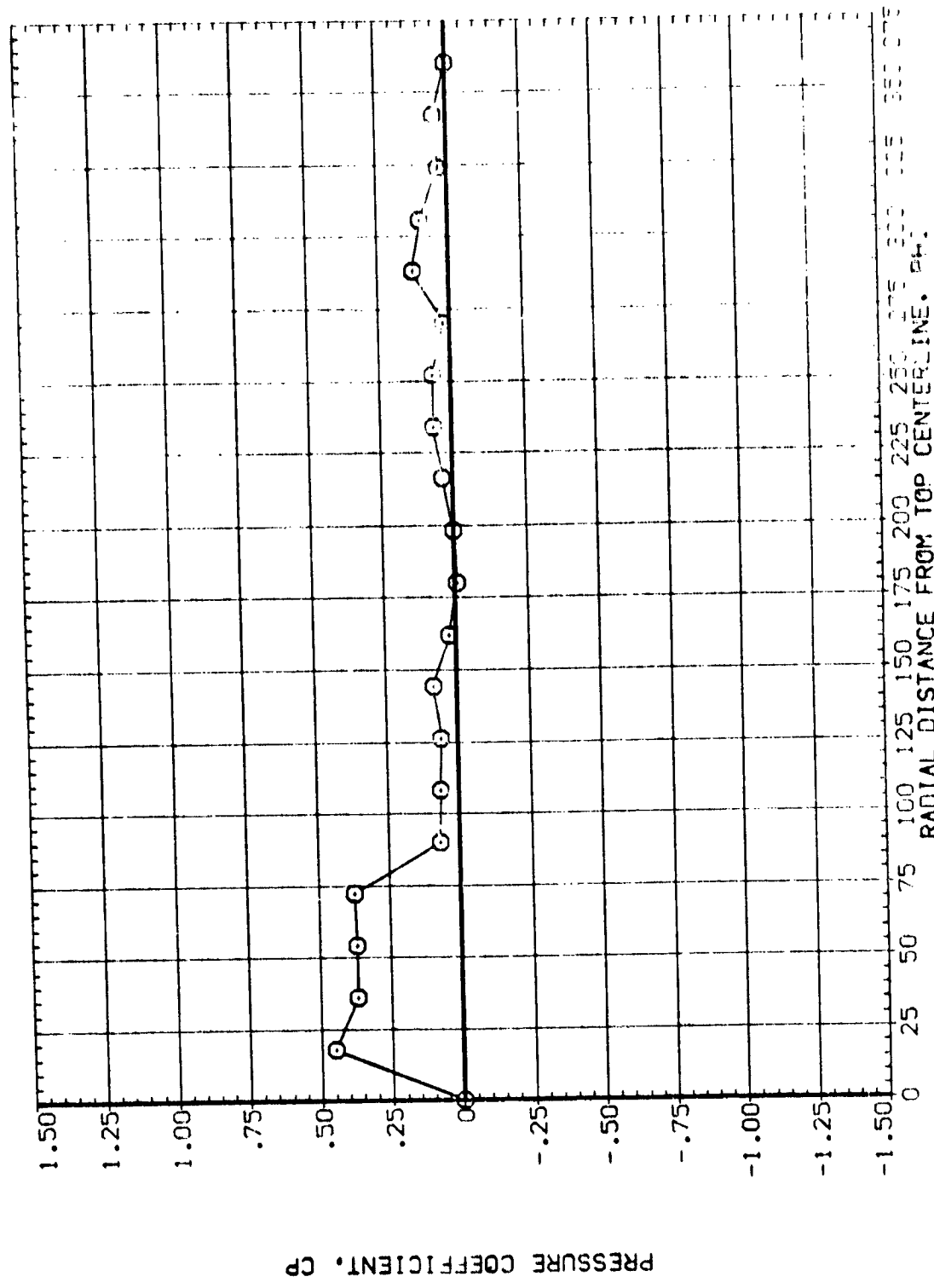
1.000

1.000

1.000

1.000

1.000



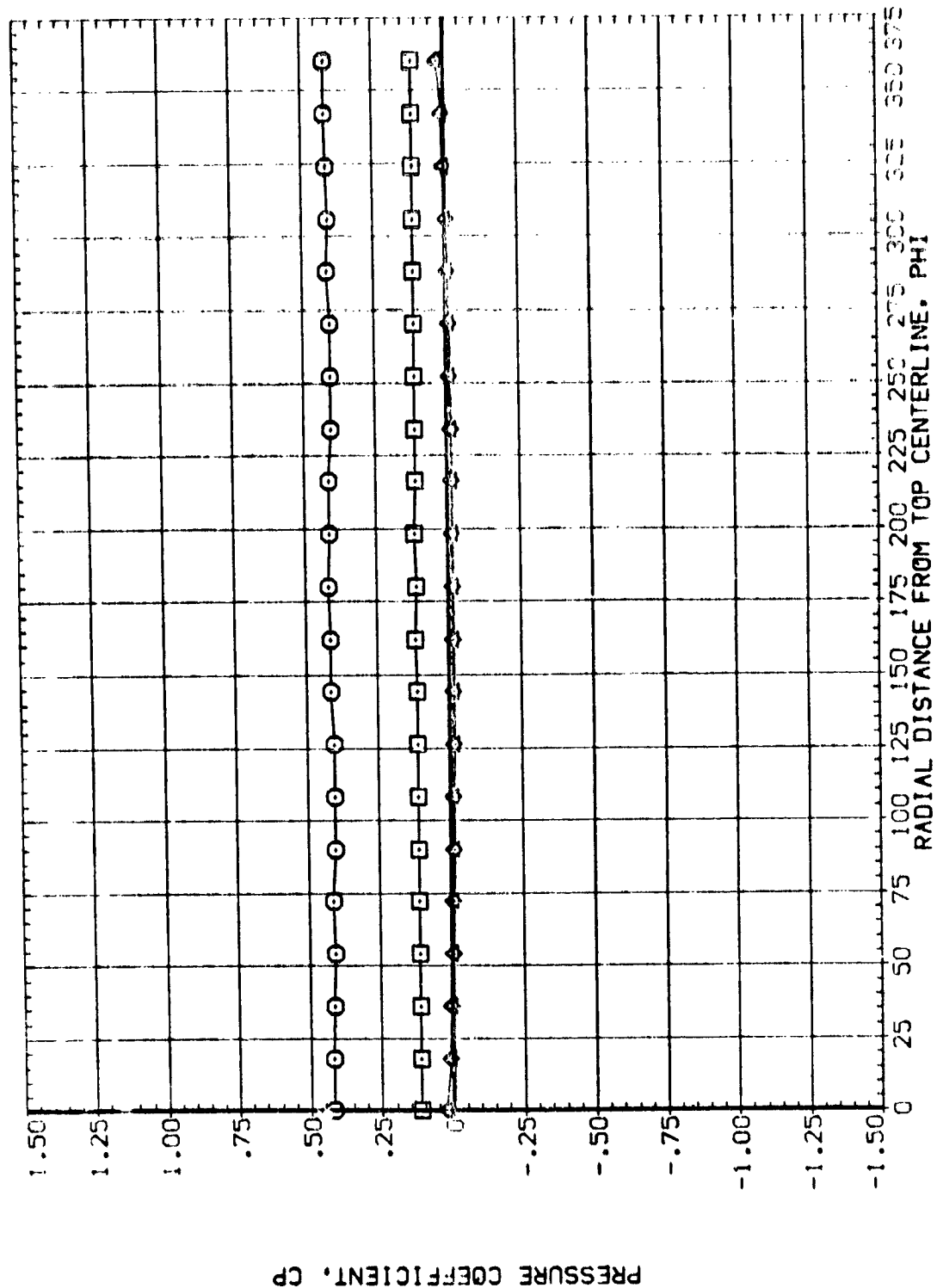
RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK TS 93/2 93/2 93 US





# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETER VALUES	
				SIZE	SO. IN.	ALPHA	CONFID
○	.076	.000	3.500	6.198	IN.	DELTA Z	100
□	.155			5.313	IN.	DELTA Z	100
△	.220			2.549	IN.	DELTA Z	100
◇	.236			2.549	IN.	DELTA Z	100



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 US EXTERNAL TANK (450000)

SYMBOL

X1/T  
.271  
.214  
.360  
.382

BETA  
.000  
.000

MACH  
2.500

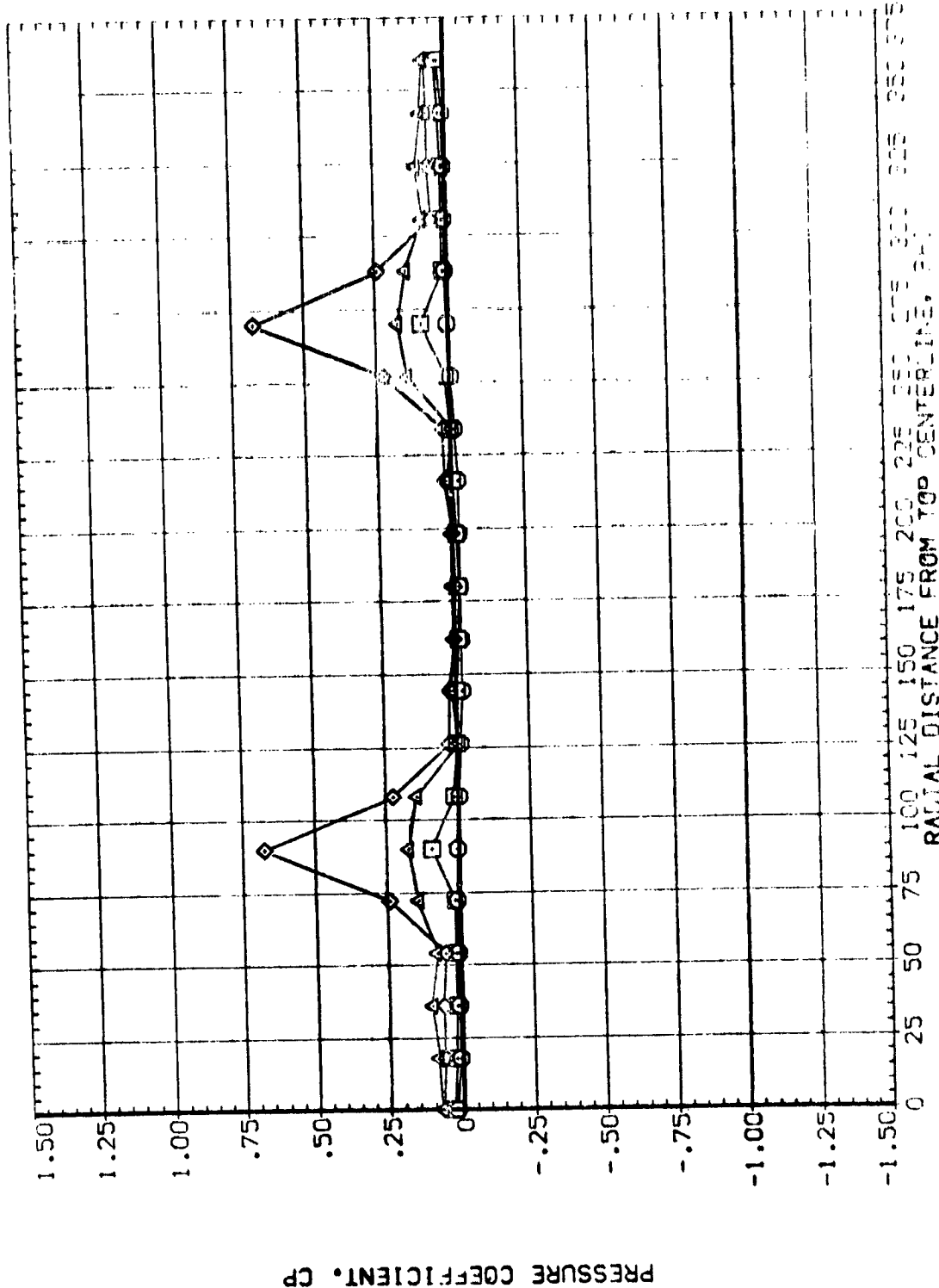
REFERENCE DATA  
SREF 6.196  
LREF 3.313  
BREF 3.313  
XMRP 2.549  
YMRP .000  
ZMRP .000

SQ. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA Z  
A-SOS

PARAMETER VALUES  
.000  
.140  
.000  
POSITIVE  
NEGATIVE

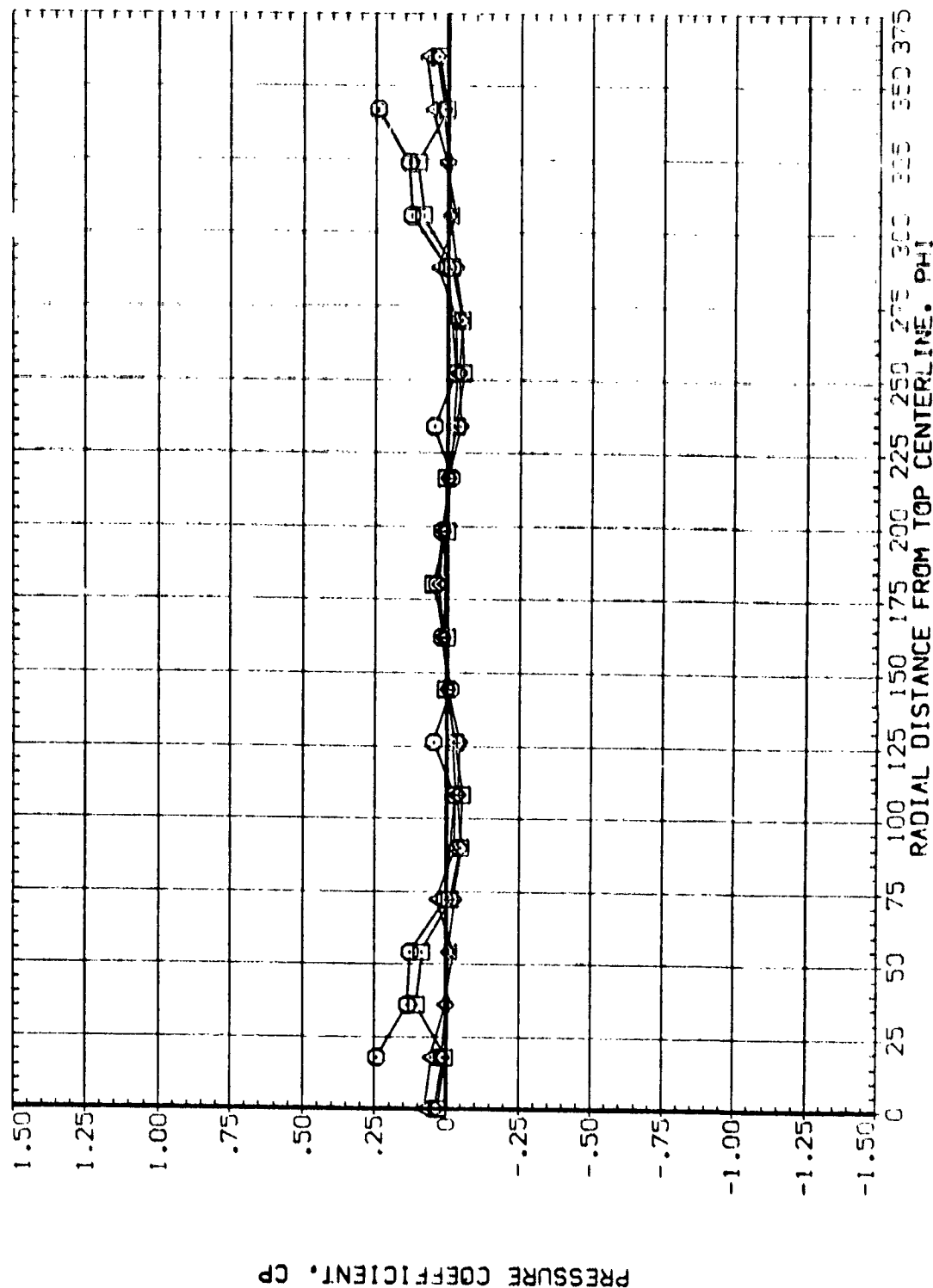
50 100  
.000  
.000  
.500



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 US

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82106)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.438	.000	3.500	SREF 6.198	CONF IS 90.000
□	.506			LREF 5.313	DELTAZ .000
◇	.573			BREF 5.313	DELTAZ .000
△	.641			XREF 2.549	K-SPB 358.14
				YREF .000	
				ZREF .000	



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 03 U5





MSFC 567 (1432F1 T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82106))

SYMBOL  
O

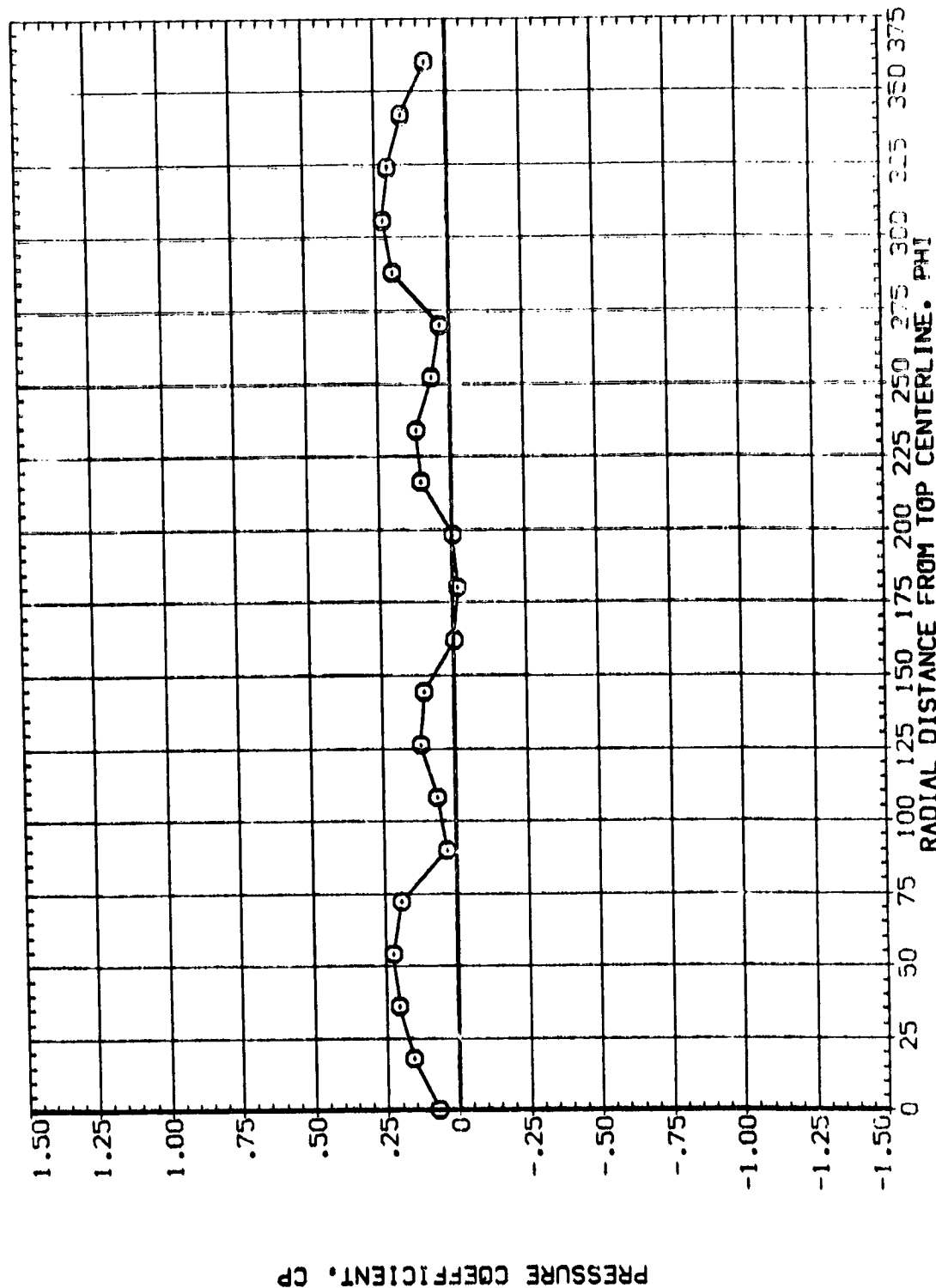
X/VT .954 BETA .000 MACH 3.500

REFERENCE DATA  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPROP 2.549  
YPROP .000  
ZPROP .000

SU. IN.  
IN.  
IN.  
IN.  
IN.

ALPHA  
DELTA  
X-S98

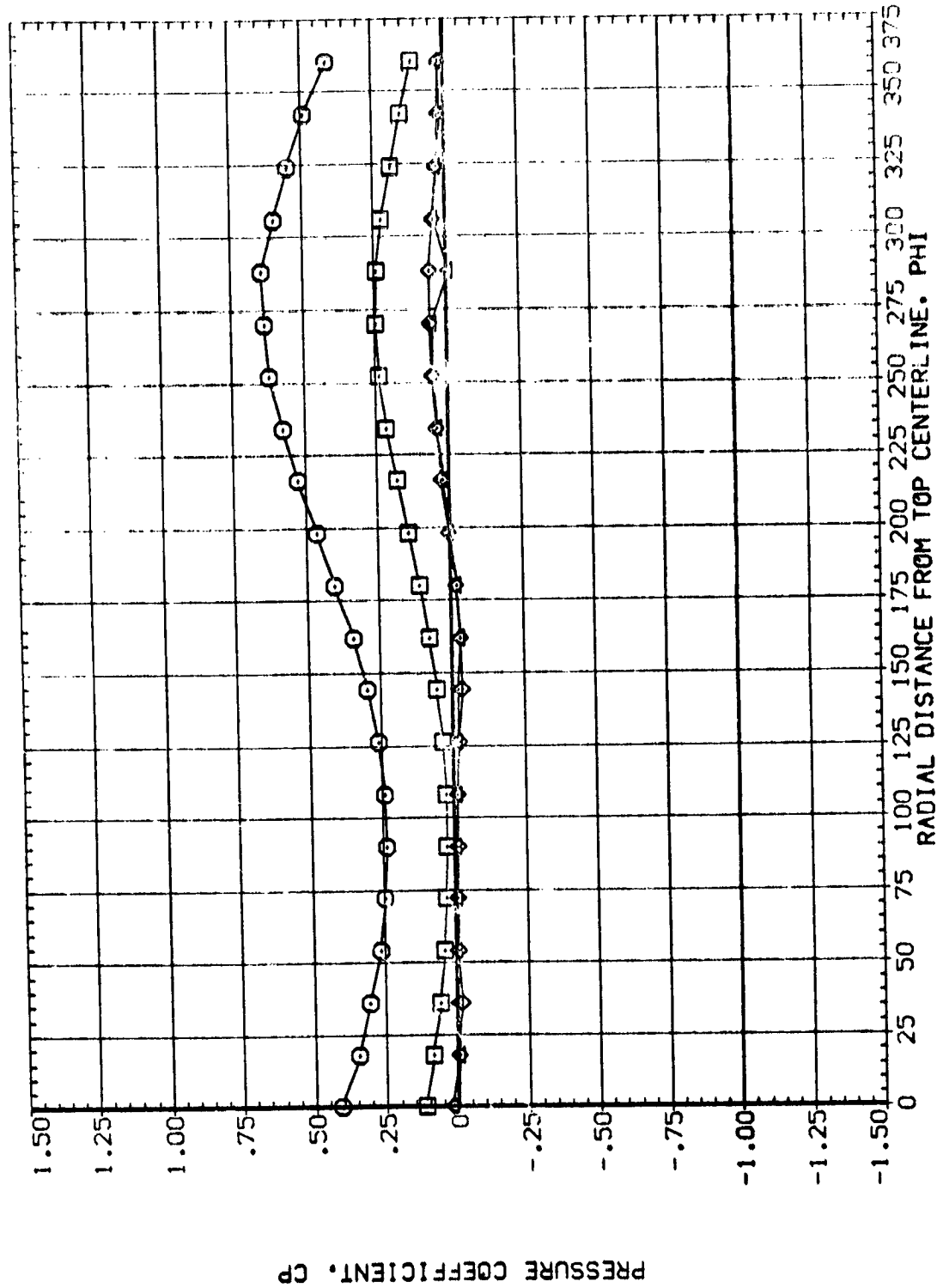
PARAMETRIC VALUES  
X/VT .954  
BETA .000  
MACH 3.500  
SREF 6.198  
LREF 5.313  
BREF 5.313  
XPROP 2.549  
YPROP .000  
ZPROP .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

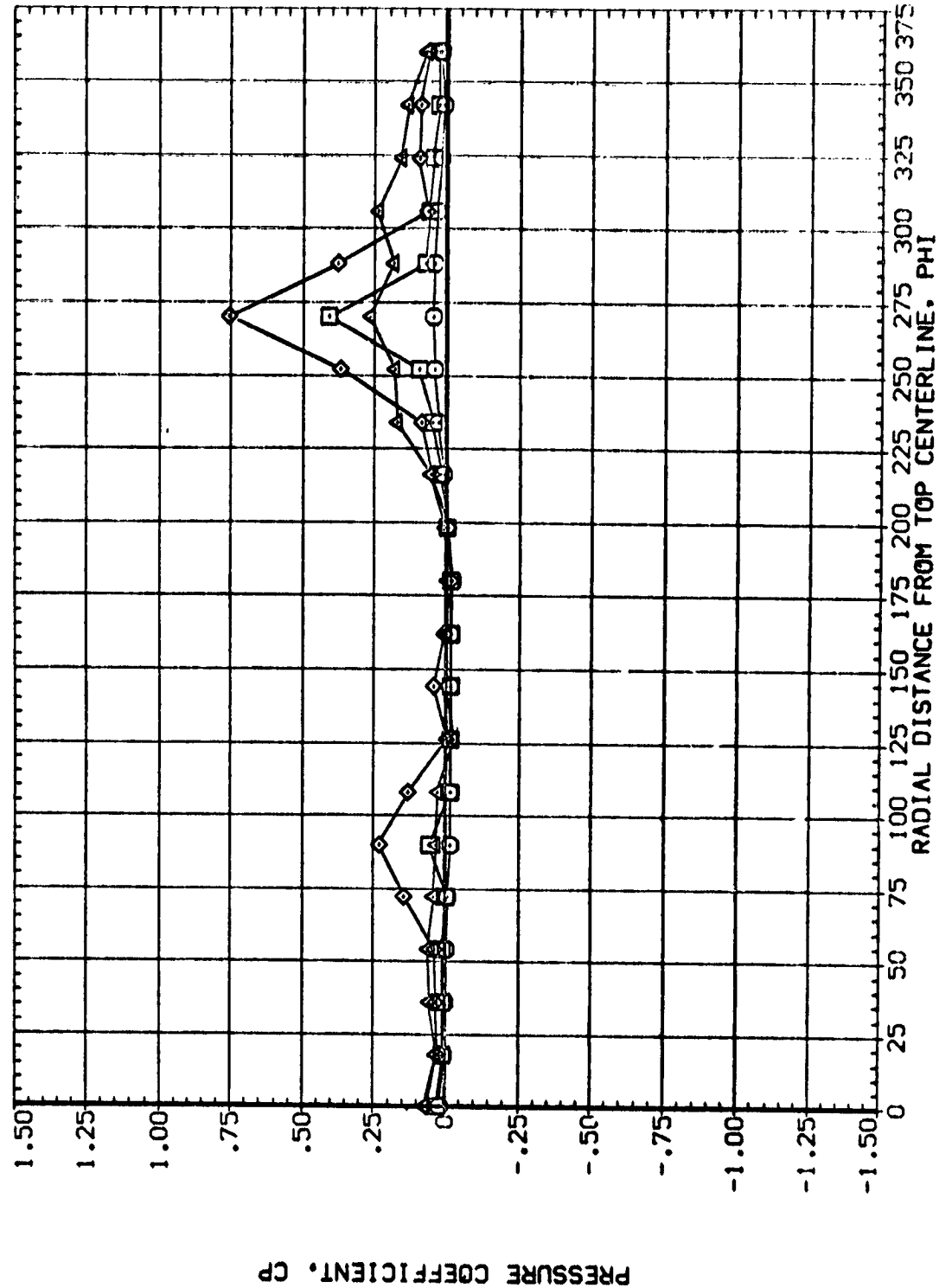
SYMBOL	X/UT		BETA		MIN/H		REFERENCE DATA		PARAMETRIC VALUES	
	0.076	0.155	0.220	0.235	8.000	1.500	SREF	6.104	ALPHA	30.000
							LREF	5.213	CELTAF	1000
							REF	5.213	REF	1000
							XREF	5.213	REF	1000
							YREF	5.213	REF	1000
							ZREF	5.213	REF	1000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 03 U5 EXTERNAL TANK (A82106)

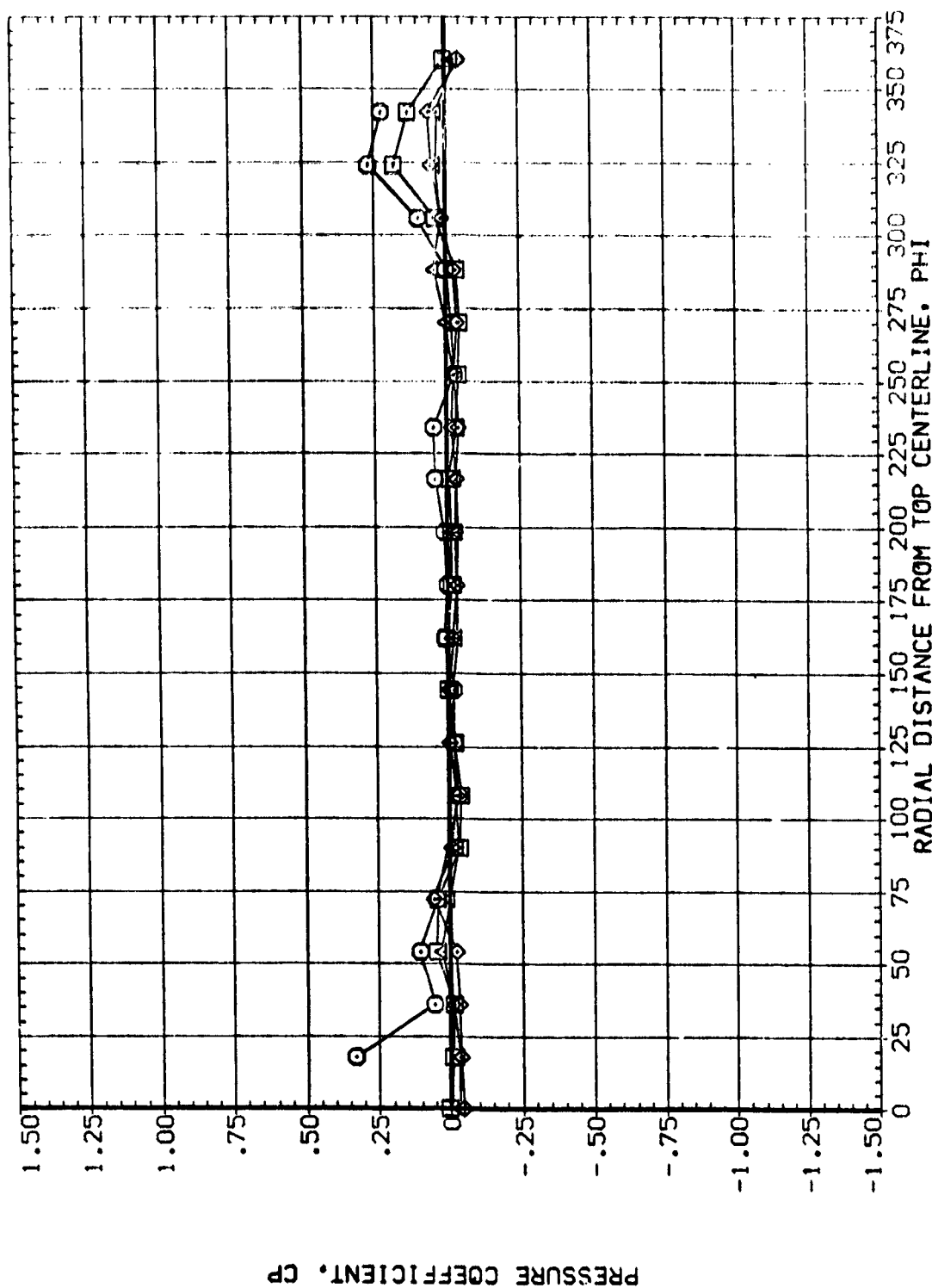
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES			
				SRF	SO. IN.	ALPHA	CONFIS	90.000	
○	.271	8.000	3.500	LRFP	5.313	DELTAZ	.000	RJDER	.000
□	.314			XRFP	2.549	X-SRB	.140	OPBINC	.500
△	.350			YMRP	.000		.000		
◇	.392			ZMRP	.000				



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(1A32F) T9 S3/2 S3/2 03 US EXTERNAL TANK C821060

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA		PARAMETRIC VALUES	
				SREF	SO IN.	ALPHA	CONFID
○	.438	8.070	3.500	LREF	IN.	DELTA	CONFID
□	.506			BREF	IN.	N-SRE	CONFID
◇	.573			X-MSP	IN.		CONFID
△	.641			Y-MSP	IN.		CONFID
				Z-MSP	IN.		CONFID

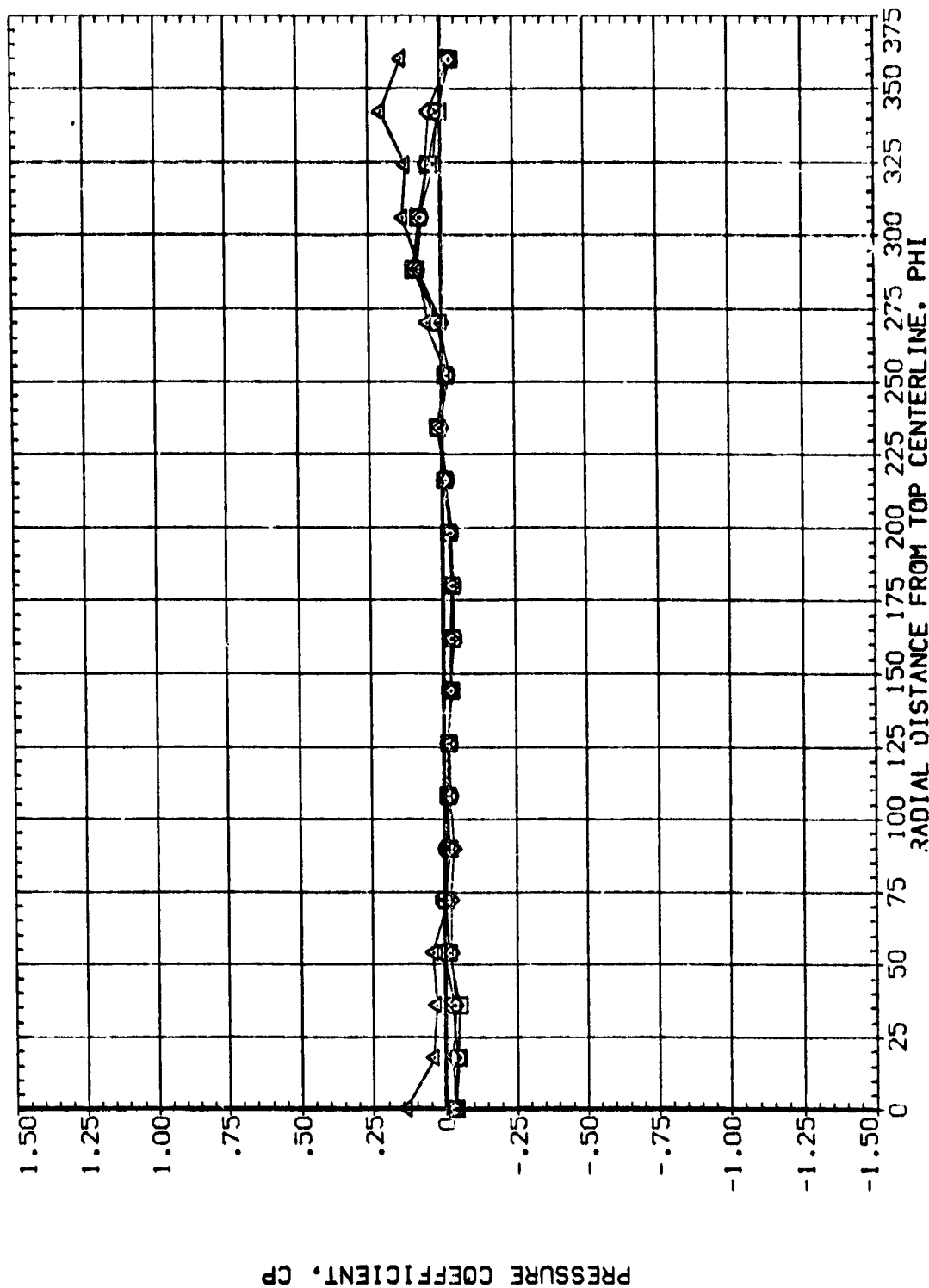


RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 US



# MSFC 567(1A32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A82T06)

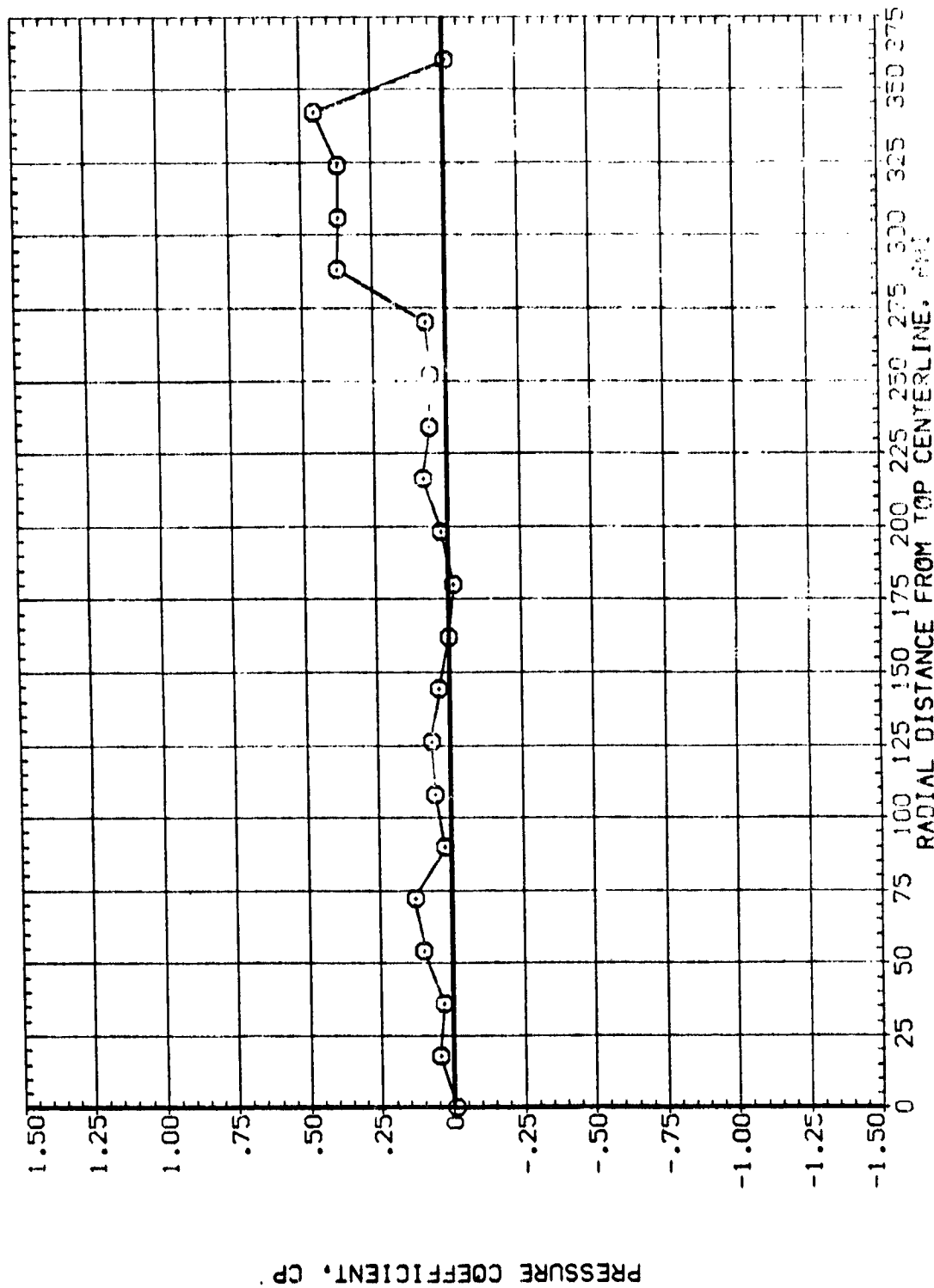
SYMBOL	X/LT	BETA	MACH	REFERENCE DATA	PARAMETRIC VALUES
○	.708	8.000	3.500	SREF 6.198	CONF 15 90.000
□	.776			LREF 5.313	.000 RUDDER .000
◇	.844			BREF 5.313	.000 .000
△	.912			XMRP 2.549	.000 .000
				YMRP .000	.000 .000
				ZMRP .000	.000 .000



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5

# MSFC 567(IA32F) T9 S3/2 S3/2 03 U5 EXTERNAL TANK (A92108)

SYMBOL	X/LT	BETA	MACH	REFERENCE DATA				PARAMETRIC VALUES			
				SREF	LREF	BREF	XMRP	SG. IN.	ALPHA	CONF. 15	90.000
○	.984	8.000	3.500	5.193	5.313	5.313	2.545	IN.	DELTA Z	R-CLER	.000
								IN.	X-SRB	SPS IN.	.500
								IN.			
								IN.			
								IN.			



RADIAL PRESSURE DISTRIBUTION ON EXTERNAL TANK T9 S3/2 S3/2 03 U5